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REFORM OF THE REGULATORY PROCESS FOR COMMERCIAL NUCLEAR POWERPLANTS

COMPLETED
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HEARINGS

BEFORE THE

SUBCOMMITTEE ON NUCLEAR REGULATION

OF THE

COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

NINETY-NINTH CONGRESS

SECOND SESSION

ON

ORIGINAL

S. 1235

A BILL TO REORGANIZE THE FUNCTIONS OF THE NUCLEAR REGULATORY COMMISSION BY ABOLISHING THE COMMISSION AND, IN ITS PLACE, ESTABLISH THE NUCLEAR REGULATION AGENCY, IN ORDER TO PROMOTE MORE EFFECTIVE AND EFFICIENT NUCLEAR LICENSING AND REGULATION

S. 2291

A BILL TO AMEND THE ENERGY REORGANIZATION ACT OF 1974 TO CREATE AN INDEPENDENT NUCLEAR SAFETY BOARD

S. 2471

A BILL TO ESTABLISH AN OFFICE OF INSPECTOR GENERAL IN THE NUCLEAR REGULATORY COMMISSION, AND FOR OTHER PURPOSES

JUNE 17 AND 18, 1986

Printed for the use of the Committee on Environment and Public Works

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REFORM OF THE REGULATORY PROCESS FOR COMMERCIAL NUCLEAR POWERPLANTS

TUESDAY, JUNE 17, 1986

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON NUCLEAR REGULATION,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:25 a.m., in room SD-406, Dirksen Senate Office Building, Hon. Alan K. Simpson (chairman of the subcommittee) presiding.

Members present: Senators Simpson and Stafford.

OPENING STATEMENT OF HON. ALAN K. SIMPSON, U.S. SENATOR FROM THE STATE OF WYOMING

Senator SIMPSON. Good morning.

Good morning, Mr. Chairman, I didn't see you when I was making my rounds down there. Nice to have you here, sir.

We have a bit of a schedule change here. We will have to juggle things around a bit. Senator Biden has been delayed this morning, and he will not be able to be here until around 10, and Senator D'Amato, sometime between 9:30 and 9:45. So we are going to go ahead with the testimony from the Commissioners. Then, when these two colleagues arrive, we will take their testimony. While that might interrupt the Commission's testimony, we can then come right back for remaining statements, and an uninterrupted period for questions.

I do welcome you here this morning. We are going to have a couple of days of hearings on a subject that is, in my personal judgment, the single most important nuclear issue facing the Congress, the NRC, and the nuclear industry today, and that is reform of the regulatory process for commercial nuclear plants.

As we begin, I am reminded of what perhaps is the most important and the most pressing recommendation to come from the Rogovin Commission, the Kemeny, and the numerous post-TMI investigations, such as the language in the Rogovin report which stated that "We have found in the NRC, an organization that is not so much badly managed, as it is not managed at all."

"In our opinion," and this is quoting from Rogovin:

> . . . the Commission is incapable, in its present configuration, of managing a comprehensive national safety program for existing nuclear powerplants adequate to insure public health and safety. A radical reorganization of the Commission's structure and management is called for now.

That was 6 years ago, which is nothing but a fleeting moment of time in Washington. Yet, despite the near universal criticism of the collegial process as an ineffective means for regulating commercial nuclear power, and in the face of this unqualified endorsement of a single administrator by both the Kemeny and Rogovin reports, and by four of the five sitting Commissioners, we have only marginally improved the ability of the Commission to regulate commercial nuclear power in this country in a safe, efficient, and effective manner.

Eleven years of experience with collegial regulation, seven since TMI, have provided, I think, ample evidence that that process simply does not work. Our efforts to redress the problem in 1980, when we reorganized the Commission, have had virtually no effect.

As I reread the findings of Kemeny and Rogovin, the underlying problems they identified 7 years ago are still with us today. The advantages of collegial regulation have failed to materialize. We have a collegial body that does not college. We have public participation, which has now become the raucus battle cry of a handful of Washington-based public interest groups who purport to represent the public, while all the while, with their burial shovels in hand, are standing goulishly over the gravesite.

The large public interest in safe nuclear power has suffered as a result of inefficient and indecisive regulation. Worst of all, we really have a system that diffuses rather than concentrates responsibility and accountability.

So it is no small wonder to me that the Commission has lost the battle to restore credibility to nuclear regulation, and that we have pending now before the subcommittee two bills specifically directed to take away, or duplicate in another agency, responsibilities that now rest with the Commission.

These problems, and the symptoms that these bills address, stem from this sterile and, I think, sometimes, absurd collegial approach to regulation that is fundamentally unworkable.

That is not an indictment of any individual member, past or present, of this Commission. I have come to know all of you personally, and I have the greatest respect for you individually, and for the terribly tough task which you face, and the job you have tried to do.

I wholly reject the notion that you have become complacent about nuclear regulation. Nor is it an indictment of the nuclear power industry, where significant strides have been made in response to post-TMI recommendations to improve the way in which they are constructed and operated. But you are all constrained by an unworkable and inefficient legislative framework, which was set up 40 years ago by Congress, and imposed on the Commission in 1975, when it was set up as a Federal agency exclusively responsible for regulating commercial nuclear power. Unfortunately, but realistically, under this system, no one Commissioner is ultimately responsible for ensuring that the job gets done, and accountable when it does not.

So the time has come, I think, to change the system. If the Chernobyl accident tells us anything, it is that we should redouble our efforts to improve the regulatory process in this country.

So it is a theme that I return to, and you know what a persistent rascal I can be. I think that it is something that we must continue to address, and I intend to do so in a fair, and I hope effective way.

If we had another Three Mile Island, it would be embarrassing. You wouldn't like it. It would be a 12-camera hearing, and boy would they show up just to dismember 5 nice guys. That is exactly what will happen the next time under the present situation, period.

I think you want to spare yourselves that. Indeed, I do. So I welcome you and I look forward to a couple of days of hearings. We will have, as I said, Senators Biden and D'Amato a little later. I look forward to working with them, and working, as always, with the NRC on these issues of deep concern.

With that, Chairman Palladino, we will be pleased to hear your remarks.

STATEMENT OF NUNZIO J. PALLADINO, CHAIRMAN, NUCLEAR REGULATORY COMMISSION, ACCOMPANIED BY THOMAS M. ROBERTS, COMMISSIONER; JAMES K. ASSELSTINE, COMMISSIONER; FREDERICK M. BERNTHAL, COMMISSIONER; AND LANDO W. ZECH, JR., COMMISSIONER

Mr. PALLADINO. Thank you, Mr. Chairman.

Mr. Chairman, and members of the committee, the Commission is pleased to appear before you today to discuss proposals to restructure the agency with a single administrator, to establish a Nuclear Safety Board, and to create an independent inspector general for the NRC.

With your permission, Mr. Chairman, I would like to submit the Commission's complete prepared statement for the record, and present only a summary at this time.

Senator SIMPSON. Without objection, so ordered.

Mr. PALLADINO. Thank you, Mr. Chairman.

With respect to restructuring the agency with a single administrator as proposed in S. 1235, each Commissioner has given this matter considerable thought and a majority of the Commission supports the single administrator concept.

As you noted, following the Three Mile Island accident, both the Kemeny Commission and the Rogovin Special Inquiry Group recommended that the NRC be headed by a single administrator. More recently, the Grace Commission recommended that Congress enact legislation which would strengthen the authority of the Chairman as the chief executive officer of the agency.

In large part the central focus of the debate on the structure of the NRC is whether the public is better served by an organization where important decisions are made through a collegial process or by a more efficiently managed agency headed by a single decisionmaker.

In addressing this issue, the Rogovin Inquiry Group stated, and I quote, "there is not an agency in Government that would not better provide for a diversity of views if it were headed by a Commission. It is not likely, however, that any of these agencies would be as well managed."

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One hundred commercial nuclear powerplants have been licensed to operate, and the Commission's focus now is on ensuring the safe operation of those operating plants. In carrying out this role, it is the Commission's view that efficient management is increasingly important.

Collegial decisionmaking and efficient management are not well suited to each other. For example, prompt decisionmaking is difficult because there must be afforded for each Commissioner time to consider the issues and provide separate views.

Moreover, the Government in the Sunshine Act has greatly diminished the exchange of diverse views which is the primary benefit of a commission structure. In the event that Congress does not enact legislation to create a single administrator, then the Commission would encourage a congressional review of the Sunshine Act to eliminate or reduce the problems it creates for collegial decisionmaking.

The Commission opposes S. 2291 which would establish an independent Nuclear Safety Board. In 1984, Congress directed the NRC to conduct a study of the need for and feasibility of an independent organization responsible for conducting investigations of significant safety events at NRC-licensed facilities. In response, the NRC contracted with Brookhaven National Laboratory. Brookhaven's final report recommended the establishment of a statutory office of nuclear safety, headed by a director reporting to the Commissioners.

Brookhaven concluded that, in general, the NRC investigations of operating events have been conducted in a "proficient and technically competent" manner. Many of the improvements recommended by Brookhaven have been adopted as part of the newly established and successful NRC Incident Investigation Program.

Based on the Commission's review of the Brookhaven report and other studies of the issue, the Commission believes that there are no major deficiencies in the NRC accident investigation program that would warrant formation of an independent Nuclear Safety Board.

It is argued that a Nuclear Safety Board would increase confidence in the investigatory process by relieving the NRC of the responsibility to investigate and determine the cause of an event to which the NRC's own regulatory activities might have been a contributing factor.

However, under S. 2291, the Nuclear Safety Board could direct the NRC to perform the desired investigations and then review the results. This would not create the perception of an independent investigation.

On the other hand, if the Nuclear Safety Board would conduct its own investigations, then the resources contemplated for the Board would need to be substantially augmented. A Nuclear Safety Board would also likely lead to a duplication of existing Commission functions.

Further the Board's activities might hinder the Commission from acting effectively in the event of an accident.

The Commission also opposes S. 2471 which would establish an inspector general within the NRC. The Commission's audit and investigative unit for internal affairs—the Office of Inspector and

Auditor, known as OIA—has direct access to the Commissioners, and has all the necessary independence to do its job.

Moreover, since the agency is relatively small, the Commission believes it is important that OIA remain a necessary management extension of the Commission in overseeing the programs and activities of the NRC. Establishment of an independent inspector general would take some of the management benefits away from the Commission.

Furthermore, by including under the inspector general the activities of the NRC's Office of Inspector and Auditor, as well as NRC's Office of Investigation, the bill would diffuse the attention of the inspector general by directing its operations to both internal and external problems. Also, by some of its provisions, the inspector general function would overlap and complicate some of the Commission functions with respect to investigating licensee actions and safety issues.

The overlap of responsibilities would be even more complex if both the proposed inspector general bill and the proposed Nuclear Safety Board bill were to be enacted.

Finally, Mr. Chairman, in response to your request, we commend several other legislative proposals to you. The Commission believes that the time is long overdue for licensing reform legislation. The extension of the Price-Anderson Act is also essential. We also encourage Congress to enact S. 274, legislation which would enhance physical security at power reactor sites by authorizing our licensees to have access to FBI criminal history records.

This concludes the Commission's statement, Mr. Chairman. We appreciate the opportunity to discuss these important matters with you. The Commission will be pleased to respond to any questions you may have.

If I may, Mr. Chairman, before we get to questions and answers, I would like to add several brief personal comments regarding the bills under discussion today.

On S. 1235, I believe that to give the Director the ability to do his job effectively, he should have a say in the appointment of officials below the level of Deputy Director. I would like to suggest an alternative scheme to that in S. 1235 regarding appointment of these officials.

My suggested approach would be that followed by the Federal Aviation Administration. There, the President appoints the Administrator and the Deputy Administrator. The FAA Administrator appoints the Associate Administrators.

Second, with regard to S. 2291, establishing a Nuclear Safety Board, I see a great deal of overlap between NRC's responsibilities and the NSB's function which I believe will lead to confusion. For example, each can institute investigations, each can task licensees, and action by one can impede actions by the other. Such confusion can delay correction of safety issues and resolution of enforcement actions.

Third, with regard to S. 2471, establishing an inspector general, I would urgently request that this bill, if passed, limit the functions of the inspector general to the usual investigations regarding internal agency operations and not add the complexity of functions associated with investigations of licensees.

If both the inspector general bill as proposed and the Nuclear Safety Board bill as proposed were enacted, I believe there would be created an administrative maze that would challenge all participants.

Senator SIMPSON. Thank you very much, Mr. Chairman.

Do we have any brief statements by any of the other Commissioners? I would accept brief, brief statements.

Mr. ASSELSTINE. Yes, Mr. Chairman.

Senator SIMPSON. Mr. Asselstine.

STATEMENT OF JAMES K. ASSELSTINE, COMMISSIONER, NUCLEAR REGULATORY COMMISSION

Mr. ASSELSTINE. I take a somewhat different view of the three bills being considered by the subcommittee than does the Commission majority. I favor retention of the commission form of organization and therefore do not support restructuring the NRC as an agency headed by a single administrator as proposed in S. 1235. However, I believe that the Commission, the Congress, and the public would all benefit from the establishment of a Nuclear Safety Board and a statutory inspector general. I, therefore support enactment of S. 2291 and S. 2471 with some modifications, which I will describe in a few moments.

At the outset, Mr. Chairman, I think it is worth taking a careful look at just what the Commission majority is proposing. The majority favors the establishment of a single administrator, but with no independent safety review group and with no inspector general. That would be a very different decisionmaking process than we have today. Decisions on major policy issues would be made in private without benefit of the exchange of differing viewpoints and with reduced public involvement or observation. There would be no independent group to serve as a check on the industry's and the agency's safety performance, to review operating experience at the plants, and to investigate accidents and serious operating events at our licensed facilities. There would be no independent source of advice to the Congress on the current state of nuclear safety and the adequacy of the Federal regulation program. And, unlike virtually every other single-administrator agency in the Government, there would be no independent watchdog to police internal agency misconduct. Finally, the majority advocates streamlining the licensing process for future nuclear powerplants by substituting a discretionary hearing for the present right to a hearing by interested members of the public prior to plant operation. This change would allow the Commission broad discretion to reject hearing requests prior to plant operation on such issues as emergency planning, quality assurance, and readiness for operation. Given the Commission's past reluctance to grant discretionary hearings—only one has been granted and it ended in the Commission's rejection of all of the NRC technical staff's proposed safety improvements for the plant—as a practical matter this probably means an end to hearings on these issues of greatest interest to the public. The upshot of all this would be a much more closed system with less debate and public ventilation of nuclear safety issues, with less technical oversight of the agency's and the industry's performance, and with substantially reduced public involvement.

Mr. Chairman, I believe that such a system is fundamentally at odds with the plan envisioned by the Congress in 1954 when it gave the responsibility for nuclear safety regulation to a Commission. It is worth remembering that the 1954 act struck an important bargain. The States were preempted from safety regulation of nuclear powerplants, but in return, there was to be an open Federal regulatory process. The broad public policy issues associated with nuclear regulation were to be considered by a multimember Commission, composed of individuals with different backgrounds, experience, training, and views on the issues. The views of the members of the Commission were to be available not only within the collegial decisionmaking process, but also to the Congress and the public. The public was to be involved extensively throughout the process, and they were to be given the right to a hearing on each valid safety issue and to have that issue resolved by a group of independent judges, separate from the NRC technical staff. If the Congress intends to restructure the NRC in a manner that will sharply reduce the benefits to the public and the States provided by the 1954 act, as the majority now recommends, then perhaps it is also time to reconsider the other side of the balance that was struck in 1954. Specifically, it may be appropriate to restore to the States the authority to set and enforce their own safety requirements for the facilities provided that those standards meet or exceed the minimum Federal standards.

Mr. Chairman, the majority offers several arguments in support of the single administrator form, and I would like to address each one briefly. First, the majority argues that a single administrator will result in more efficient management and decisionmaking than does the commission form. I do not believe this is necessarily the case. In fact, a comparison of the performance of the NRC with the two other single-administrator agencies with nuclear responsibilities, DOE and EPA would seem to indicate that the Commission is at least as efficient in management and decisionmaking.

The Commission has been far ahead of EPA, for example, in promulgating its technical requirements for high-level radioactive waste disposal, low-level waste disposal, and uranium mill tailings. Similarly, the Commission was able to carry out its responsibilities for the site-selection guidelines for the high-level waste repositories much faster than has DOE. On the basis of actual experience, I would argue that the Commission form is not necessarily more inefficient than is the single administrator. Nor do I see significant delays in Commission decisionmaking. Where delays occur, it is invariably because the issues are complex and the choices are far from clear. Such difficult decisions take time, whether they are being considered by a single administrator or a commission.

Second, the majority contends that the Commission form is outdated, and is ill-suited to the oversight of 100 operating nuclear powerplants. Implicit in this statement is the argument that the Commission no longer faces the types of broad public policy issues that benefit from full and open discussion by a multimember group with differing viewpoints. I do not believe this is the case. In recent years, the Commission has considered or is in the process of considering a broad range of safety issues, including: the adequacy of safety at the Indian Point plants; the Commission's severe accident policy; the Commission's requirements for backfitting new safety features on existing plants; the radioactive source term for a severe accident; safety goal for assuring the safety adequacy of current and future plants; the adequacy of emergency planning requirements; the Commission's confidence that permanent waste-disposal facilities will be available when needed; the soundness of our enforcement policy; and reactor decommissioning to name just a few.

Each of these is a major policy issue that is particularly well suited to consideration by a multimember Commission, and I expect that we will continue to be faced with such issues in the future.

Although I am sure that the NRC would benefit from greater management attention in the oversight of the 100 operating plants, I believe that this can be readily accomplished with the commission form. For example, there is nothing to prohibit the Chairman from taking a more active and direct role in assuring that the NRC staff carries out the regulatory policies established by the Commission.

I believe that Commissioner Zech intends to have a more active management role as Chairman, and I welcome that. So long as he does not attempt to alter Commission policy or make policy decisions on his own, there is nothing to prevent the Chairman from taking a more active role in the day-to-day management of the staff. Indeed, such an approach provides for improved management oversight while at the same time retaining the benefits of Commission consideration of the broad public policy issues that routinely come before the agency. I might add that no additional legislation is needed for the Chairman to carry out this management role. Trying this approach, in my view, is preferable to replacing the Commission form with a single administrator.

The remaining two reasons given by the majority in support of the single administrator are more troubling to me. The majority argues that existence of differing Commission views on the issues can confuse the staff and the public, and the majority objects to being required to hold its deliberations in public, as required by the Government in the Sunshine Act. I should note that the latter objection goes far beyond previous Commission statements in favor of some limited authority to hold private discussions to exchange preliminary thoughts on issues before the Commission. I am not impressed by either of those arguments. I believe that the Congress and the public benefit from hearing different views and perspectives on the significant policy issues before the Commission. Rather than confusing the public and the staff, they assure that different viewpoints are heard and considered. As for the Sunshine Act, whatever the merits of some limited preliminary discussions in private, the actual debate on the principal safety issues facing the NRC should take place in public. Why should the States, that have been preempted from setting safety standards for nuclear reactors, also be preempted from the Federal deliberative process for setting safety standards or assessing the public health and safety significance of operating events and accidents? To give just one example, in the aftermath of the Chernobyl accident, the public is most concerned with whether we can expect to see a core meltdown in the United States in the foreseeable future, what the chances are that such an accident could lead to large offsite releases of radiation, whether the Commission views the present level of risk to be acceptable, and if not, what we are doing to reduce it. These are the kinds of issues that the Commission should address openly and in a public forum. Instead, the Commission seems to be arguing for the need to consider these and all other safety issues affecting the public in private.

Mr. Chairman, I also do not believe that a single administrator form is in the industry's best interests. The industry continually argues for the need for improved regulatory stability and predictability, given the fact that 10 years or more are needed to build the plants, and the plants are expected to operate for 30 to 40 years. With a commission, major policy changes tend to occur gradually, since turnover among individual Commissioners is staggered. With a single administrator, large changes in policy and direction can occur quite rapidly, often with drastic consequences for the regulated industry.

I think the experiences of recent years with EPA and the Department of the Interior are good examples. One should consider whether this industry, with its particular need for predictability and stability, would be best served by a regulatory system that is subject to wide and rapid fluctuations.

On the subject of the Nuclear Safety Board, I believe that an independent safety board is needed to assure that we and the industry learn the crucial lessons of operating experience at the plants. Although improvements have been made in recent months in our ability to investigate serious operating events, our capability to seek out and correct the root causes of these events is still inadequate. Despite two investigations of the Davis-Besse event last year, including one involving some people from outside the NRC, we still do not have a clear understanding of the root causes of that event, including particularly the contributions of management attitudes and practices by the licensee's senior management and the role of the NRC staff in not bringing about effective corrective action early on. The same is true for the Rancho Seco event last year, which raises even more serious questions about the NRC's past performance in regulating the Babcock and Wilcox reactors. It is simply not realistic to expect that the NRC will be able to evaluate in a critical and objective manner its own past performance. A Nuclear Safety Board would provide the necessary independence and objectivity. To avoid the proliferation of advisory groups, I would abolish the Advisory Committee on Reactor Safeguards. In view of the decline in the Commission's licensing caseload and the increasing importance of operating experience at the plant, I believe the Commission, the Congress, and the public would be better served by adding a Nuclear Safety Board and by eliminating the ACRS.

Finally, Mr. Chairman, I believe that the statutory inspector general to police internal agency misconduct would be a benefit. It would provide much needed credibility to our internal process for identifying and dealing with employee misconduct, and might improve our somewhat strained relationship with the Department of

Justice. I also see no need for direct Commission control of the functions of such an internal investigative office. Indeed the inspector general system seems to work quite well in the many agencies now subject to this system. I also note that S. 2471 also gives certain safety review and oversight responsibilities to the inspector general, and I believe that those functions are best carried out by the Nuclear Safety Board and, therefore, I would delete those provisions.

Senator SIMPSON. Thank you, Commissioner Asselstine.

I want to recognize the presence of the chairman of the full Committee on Environment and Public Works, Senator Stafford, who has been most supportive and accommodating to me in my duties as subcommittee chairman. I thank him for his continuing interest, which has been very valuable and helpful to me.

Senator STAFFORD. Thank you very much, Mr. Chairman. I regret that my day is complicated by having to preside over the Senate from 10 until 11. If I can survive the excitement of that proceeding, I will be back here by 11.

Senator SIMPSON. We know you will. Thank you, Bob.

Is there any further brief statement?

STATEMENT OF FREDERICK M. BERNTHAL, COMMISSIONER, NUCLEAR REGULATORY COMMISSION

Mr. BERNTHAL. Mr. Chairman, I did have a few comments that I wanted to make. I find myself increasingly in the middle in this body lately, and I wouldn't want to disappoint anyone today.

I do find myself in general agreement with the comments of Chairman Palladino. But it is essential, in my judgment, to realize what is at stake here and how we, on the Commission, have come to this pass of near unanimous recommendation that our jobs be abolished.

I do not believe that there are flaws inherent in the commission form of governance as originally conceived, and I want to emphasize that point, for regulating a subject as controversial as nuclear power. The need for continuity and stability in the nuclear regulatory process seems to beg for a commission. But the perverse system we now have goes far beyond stability, it is tying us in knots. It leads not to consensus, but to fragmented and, believe me, ultimately flawed decisions.

As if the constraints of a strict adjudicatory process, with all the rules of on the record, separation of functions, and ex parte, were not complicating enough for a nonlawyer like me, the Sunshine Act requires that where three or more Commissioners are gathered together, no conversation of substance may be held unless the public is also present.

In other words, we can't talk to our staff, we can't talk to you, and we can't talk to each other. It might explain why more and more Commissioners may well be found talking to themselves.

The point of collegiality is to arrive at a balanced and reasoned decision in the hope that five heads of diverse experience and knowledge are better than one. However, the Sunshine Act has so distorted and crippled the Commission concept of governance that I have reluctantly concluded that, absent significant change in the law, a single administrator is the only solution. But it would be far better, in my judgment, to permit the commission system to function as it was originally intended by the Congress than to be forced to resort to a single administrator so that the Sunshine Act is rendered irrelevant to final decisionmaking.

The Commission is a vehicle for stability and protection of the public need to know various and dissenting points of view in this matter of the safe use of nuclear energy For a subject so contentious as is nuclear power today, I believe the public will be the poorer, not having the benefit of those diverse opinions.

It is not the more politically responsive single administrator executive agencies which have been penalized into ineffectiveness and inefficiency under this statute. It is we, Commissioners, who have the inherent checks and balances and safeguards of the public interest, and in this way the estimable and worthwhile concept of collegial decisionmaking is rendered an illusion, degraded in practice to what often amounts to decisionmaking by exhaustion.

Some argue that the fault lies on the unwillingness of this Commission, as though it were really any different from all the others, to discuss publicly all matters with unalloyed frankness and candor. That is a lot like saying, as has long been said by many, that Marxism would have been a perfect system but for the deficiencies of human beings.

This misbegotten statute, the Sunshine Act, will eventually preside and is presiding now over the general demise of the commission form of governance, a form which I remain convinced has its place in our system of regulation. It will be interesting to see how much sun shines on the private deliberations of a single administrator head of the Nuclear Regulatory Commission.

The Sunshine Act and our cumbersome administrative procedures are not alone in contributing to an inefficient and sometimes ineffectual NRC. I have long believed that the Congress' decision to abolish the Joint Committee on Atomic Energy to oversee all aspects of the development and use of this still new technology was a fateful mistake.

While Congress now rightly concerns itself with the accountability of commissions, Congress, a decade ago, began to speak with a multitude of dissident voices in carrying out its responsibilities for oversight of the NRC. If the disparate opinions of five Commissioners often seem confusing to the Congress, the directives of half a dozen and more committeee of oversight jurisdiction seem equally confusing to the Commission.

This brings me to S. 2291, which embodies principles of considerable merit. More than a year ago, I urged the Commission to consider forming a separate Commission level group to investigate events such as that at Davis-Besse. Instead, we have adopted a piecemeal ad hoc approach, and have constituted separate groups to explore causes and remedies for the Davis-Besse, Rancho Seco San Onofree, and other events.

While the performance of those investigative teams has thus far been laudable with respect to technical evaluations, the question of credibility in NRC staff self-evaluation remains. Having been clearly and repeatedly counseled by the Brookhaven study, by the ACRS, and most recently by the chairman of the Davis-Besse Ad

Hoc Review Group, not to mention by events, I am at a loss to explain the resistance to such a logical administrative step. Failure to do so simply invites Congress to do what I don't believe is necessary or wise outside of the context of a single administrator agency.

I want to make myself clear on this point. I would, therefore, support the legislation proposed in S. 2291 to establish an independent Nuclear Safety Board only in the event that the NRC becomes a single administrator agency.

Finally, I would like to proffer a suggestion, Mr. Chairman, if you will indulge me, which I believe could greatly simplify the generally agreed and desirable objective to establish a single administrator NRC.

Within 2 years, all but a few nuclear powerplants in this country will have completed their construction phase and should have been licensed for operation by the Commission. Therefore, between now and 1990, this agency will make a transition from an agency preoccupied with engineering and construction to an agency monitoring nuclear powerplant operations, and the safe use and disposal of radioactive materials. That is a mode that could well continue through the remainder of this century.

Given this circumstance, it would seem to me that the Congress should seriously consider an alternative to the proposed single administrator NRC, the advantages of combining the NRC and the Environmental Protection Agency under a single agency head.

Several European countries have a similar arrangement so the idea is hardly novel. Indeed, the establishment of an independent NRC was in some respects from the beginning an accident of legislative history. Had the EPA not been constituted before the breakup of the old AEC, matters might well have turned out differently.

A number of useful purposes might be served by taking such an action at this juncture, not the least of which would be considerable administrative budget savings, and a straightforward path to single administrator. Moreover, relieved of its special responsibility to oversee the historically great multitude of engineering and construction projects, the NRC would share a common objective with the EPA, protection of the public health, safety, and the environment. Instead of the NRC and the EPA finding themselves beset by a host of overlapping jurisdictional entanglements, as we do at present.

I believe the combined expertise and institutional experience of these two agencies would prove to be wholly complimentary and, indeed, synergistic. The risks associated with acid rain, chemical wastes, air pollution, and the panoply of environmental insults generated by the activities of man should, in the long run, along with the risks of nuclear power generation, be treated on a common footing.

A combined EPA and NRC could, based on a balanced and objective view of risk and public acceptance, develop broad regulatory and environmental policy to encompass our respective areas of responsibility for the greater public good.

Thank you, Mr. Chairman.

Senator SIMPSON. Thank you for a very provocative statement, indeed.

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Commissioner Roberts, Commissioner Zech, do you have anything to add?

Mr. **Roberts**. I will briefly say, Fred, I spoke with the head of the Davis-Besse Ad Hoc Group who said that it was their unanimous opinion that we did not need a Nuclear Safety Board. As I read your testimony, that is not exactly what you said.

Senator **Simpson**. Could you pull that microphone a bit, Commissioner Roberts?

Mr. **Roberts**. We have this Davis-Besse Ad Hoc Group. They met with us publicly, and they gave us their report. Afterward, I promptly met with the Chairman who said that it was their unanimous opinion that the NRC did not need a Nuclear Safety Board, and I think that this should be pointed out.

These people spent approximately 90 days—one was from NASA, one from the FAA, and three related to the NRC—their conclusion was that we did not need a Nuclear Safety Board.

Mr. **Bernthal**. Mr. Chairman, let me clarify the point. Commissioner Roberts is right, and I have not advocated, outside the context of the single administrator agency, that we have an independent Nuclear Safety Board. What they did say very clearly—the chairman, I should say, said very clearly—he believes that there should be an independent permanent Commission level group that reports directly to the Commission on these incidents.

Commissioner Roberts is right on the question of the independent Safety Board, and I don't believe that I intended to so represent that point.

Senator **Simpson**. Commissioner Zech, please.

Mr. **Zech**. Thank you, Mr. Chairman.

I agree and support the statement of Chairman Palladino. Thank you, Mr. Chairman.

Mr. **Roberts**. As do I.

Senator **Simpson**. I just want to add, for myself, I think that it is unfortunate to portray something sinister going on when we are trying to get to a single administrator. That is absurd. There is no sudden sinister attitude to close off public participation, to go private, to do all sorts of these things, because that is not the way it works with single administrators in the executive branch right now. The EPA is a classic example.

They deal with hideously confounding, complex and controversial issues, just as much as the NRC, yet they somehow get the job done with total public participation. So, just because we bring up the sunshine law, it doesn't mean that there is a meat ax approach to chopping it to shreds. That is not my intent. I am not interested in showing secrecy and privacy as the touchstone. I am just interested in showing that it doesn't work. That is what we ought to be paying attention to, the thing doesn't work.

If it doesn't work, then you had better address all of the reasons why it doesn't work, and one of the reasons is the absurd interpretation of the sunshine law in this specific, limited place.

If you look at some of the things that get done around here, they are usually done when the group, Democrats and Republicans alike, sit down and go off somewhere and do their work, without the media, without anybody, and sometimes even without staff.

One of the things that we are doing on the floor right now is supposed to be the greatest thing that we have done in a long time, and it is. The Finance Committee went off and had a retreat all by themselves in a sinister, evil, sneaky way and sat down and said: "What are we doing?"

I think that it would be great if the five of you sat down in a room and said: "What are we doing?" How does Jim feel about Joe on these things. That is critical, I know you all, and the sooner the better. But you can't. So, if you can't we had better go to something else.

I will tell you, the people of America won't believe it when the next accident happens and you five are under the gun, not with sweet old Simpson here. Everybody in the Senate will wander in here, and they will say: "I don't believe what I am hearing. You can't do this, and you haven't talked about that." You will say: "No, we were prevented from doing that. We were not allowed to speak on that. We gave each other a notation memo, however, which was a dazzler, and that seemed to please us all for a few moments." How absurd. How embarrassing.

You don't deserve that, and it is coming. Chernobyl is really critical. The voice you will use again will be Harold Denton's. I don't blame you, you will have to use him again because it will be critically embarrassing if the five of you have to go through it—I didn't dream that this was happening.

I have the oversight, and when they come haunting like harpies around my head, I will just say: "I have been talking about that for a long time, stumbling, admittedly."

Sometime, we have to sit down as human beings and decide what is best for the public health and safety, and not just watch these issues just clog, and compound, and congeal, and nothing gets done.

Opening a plant, 5 years to open a plant, it is absurd, absolutely absurd, or to close one—I don't care what you are doing with it—but 5 years, it is just absurd.

I am trying to break the gridlock, and you are going to have to do that if we keep a constituted commission. You are going to have to do that by allowing you to sit down, in a collegial way, with your feet up on the table, and talk. If you can't get that done under the existing law, then we will go to procedures that does work in the United States with FAA, EPA, and the others, and that is a single administrator.

Your remarks about the possibility of NRC under the EPA, that is an interesting concept, and one that surely should be pursued or thought about in any event because EPA is slowly intruding on your jurisdiction in every sense, and why not. If you can't get it done, they will. They have a single administrator. So slowly they are reaching out, pulling in to themselves things that you should be doing. I recognize that, and you do, too. It is very vexing to me.

I can gather your degrees of satisfaction or dissatisfaction. How many of you believe in your bosom that the American public is getting what it deserves, or thinks it deserves from the regulatory process for commercial nuclear plants?

Mr. ZECH. I personally believe, Mr. Chairman, that the public is not being as well served as they should be under the current organization, and I fully support the single administrator.

Mr. **Palladino**. Mr. Chairman, I am quite concerned by the provisions of the Sunshine Act that prevent us from really discussing fundamental issues. Even in matters of discussing long-range thinking, we can't meet if we make any decisions. I think that the public is not well served by that kind of activity.

Before the Sunshine Act, I understand that the Commission did go off on retreats, did talk about the future activities, and I think established a better basis for consistent regulation of the nuclear industry, and enhancement of public health and safety.

Senator **Simpson**. If you could comment briefly. You argue, particularly Commissioner Asselstine, the principal advantages of the commission structure, I hear that and I understand that it is very important that your position be heard and noted carefully. Whether the Commission benefits from these so-called advantages, I guess would be the thing. If there are advantages, how come it doesn't show? That is the test, as I see it.

I would direct this to Commissioner Asselstine, to what extent do you view collegial interaction as an advantage, and it would be if it were done. But if it isn't done, it isn't an advantage, that is clear to me.

I guess the one that I want to know, and I guess the American public deserves to know, especially from those who cry out for public participation—that is the real irony of this one. These people cry out for the public to participate, and decry the secrecy and all of this business, and yet how much of the critical decisions of this agency on this terribly important industry, of direct human health and safety, how much of the important decisions that are made, are made with all five Commissioners present, and how much of the heavy lifting and the work actually takes place in that setting?

Mr. **Asselstine**. I would say, on your last question, Mr. Chairman, that it is a mix. I think, clearly, some of the issues that the Commission has faced, certainly since I have been on the Commission, have been addressed and resolved in that very setting, often in public, not always, but with the Commissioners sitting down together and deliberating.

I think that we first need to keep in mind that what we are talking about are adjudications, licensing decisions, and all of those meetings are in private. The Commission can sit down as a group and deliberate. We can talk about our initial views on the subject. We can weigh the various points of view by different Commissioners. I think that we have done that in a number of cases.

Senator **Simpson**. Let me ask you this. I can see that. I am sure that you sit down and you talk about Diablo Canyon, or you talk about this or that, but do you ever sit down and talk about the broad scope of policy, of what it is that your whole function in being is?

Do you ever sit down and talk about where do we go from here? Did you ever talk about Price-Anderson, which is one of the most critical things to scan by you right now? What did you talk about, as a collegial body, regarding Price-Anderson?

Mr. **Asselstine**. I would say, Mr. Chairman, that we did not have Commission meetings on Price-Anderson.

Senator **Simpson**. That is extraordinary.

Mr. **Asselstine**. I think that in hindsight that would have been of benefit. Although I would say this about Price-Anderson, the Commission gave that issue a great deal of consideration. The Commission itself was actively involved in revising and modifying the Commission's original report to the Congress. I think that the imprint of all of us was quite heavily reflected in that particular report.

In hindsight, I would agree with you, it probably would have been a good idea to sit down and have a meeting about the Price-Anderson Act, and the report to the Congress. We should have done that. I don't see why we couldn't discuss that kind of an issue in a public meeting, I really don't. Why we couldn't say: "What do we want in terms of financial protection for the public, and what are the pros and cons? What does the public gain, and what does the industry pay, and what are the various options, and how should we balance those competing considerations?"

Senator **Simpson**. Commissioner Bernthal.

Mr. **Bernthal**. Mr. Chairman, I would have to say that it is just illusory to think that more than about 10 percent of what we do receives any kind of collegial deliberation. I think that that may be a generous number.

The Commission doesn't sit down on a variety of issues, including Price-Anderson, because it simply is not a practical matter, frankly, for all five Commissioners to convene a public meeting every time they want to talk about any given issue.

So, what has happened is that our issues are more and more determined by discussions among our own staff, which is a terrible way to be running the NRC, I might add. I would just like to give two specific instances because I believe that as events recede somewhat into the past, it is worth pointing these out.

I have strongly believed from the day that the TMI restart decision was made on this Commission that there was a basis for a consensus decision on that very, very important, and highly divisive public issue, particularly to the people in the area of TMI.

Without question, I think, the constraints of the sunshine law prohibited the consensus decision from being reached. Maybe it never would have been, but I can assure you that my judgment all along was that it would have been possible to reach that consensus. The public was robbed of that consensus best decision in my judgment.

The second point I would make is the Commission's recently enacted backfit rule, which I believe contains at least one serious flaw. Again I think had there been a serious collegial discussion before the enactment of that new regulation, those flaws could have been ironed out. Whether or not we would have achieved consensus, I don't know, but I suspect that we would have ended up with a better product.

So, it simply is not true that there is a large fraction of our time, on a large number of issues that get resolution by the collegial process.

Senator **Simpson**. Admiral Zech.

Mr. **Zech**. Yes, Mr. Chairman, it is certainly my opinion that there is absolutely no collegiality at all on this Commission. It depends on what you mean by collegiality. My view of collegiality is, indeed, similar to the situation which you described, where you have the five of us getting together and informally discussing a broad range of issues, predecisional type, but offering from our own backgrounds, our own experiences, and thereby, perhaps, being able to bring forth some thought, as Commissioner Bernthal has just mentioned, that might indeed have contributed to a better ultimate decision.

The collegiality of those informal discussions is something that we just, by our own restrictive interpretation of the Sunshine Act, cannot do. As a matter of fact, I suggested some months ago, when we were deciding what subjects we might talk about in these collegial discussions, I said: "I am just thinking about something like how can we do our job better, how can we better serve the public." I forget the exact words I used, but that was very close. The answer I got back was that we cannot do that in a collegial discussion.

To me that is collegiality, and if we can't do that, Mr. Chairman, on this Commission, in my judgment, there is no collegiality.

Senator SIMPSON. Let the record show that none of us, at least in all of the testimony that I have heard for many months, are interested in throwing over the sunshine law. We are just interested in sitting down and saying: "What is our job? How can we do it better?"

If that flies in the face of the sunshine law, then its absurdities deserve to be addressed regardless of the shrieks and cries and anguish that would go up.

Right now, may I interrupt. Senator D'Amato is here, and if you could provide a place for him at the table, we can hear his remarks. Then we will come right back to the Commission. I thank you very much, you have been very helpful.

While Senator D'Amato is coming to the table I will take a minute to say that Senator Moynihan is unable to be here and we will place his statement in the record at this point.

[The statement referred to follows:]

STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, U.S. SENATOR FROM THE STATE OF NEW YORK

I regret being unable to attend this morning's hearing and hear of my colleagues' efforts to improve nuclear safety, but my presence is needed on the Senate floor.

I am well aware of their efforts, and I applaud them for their insight and their skill. I particularly agree with Senator D'Amato about the lack of adequate emergency planning and preparation at plants such as Shoreham.

I believe nuclear safety issues go beyond matters of organization alone—we must insist upon full and proper training for all nuclear powerplant personnel. That is why I introduced S. 16, the National Nuclear Powerplant Personnel Training Act of 1985 on the first day of the 99th Congress, and why this Subcommittee held hearings on that bill last spring.

It is my hope that raising these issues again today will contribute to more careful and effective regulation of nuclear power in the future.

Senator SIMPSON. The Senator from New York, the Honorable Alfonse D'Amato who I have learned to thoroughly enjoy, a remarkable gentleman, a thoughtful legislator. He has given us a new piece of legislation to consider, the Improved Nuclear Standards Act. It is a thoughtful piece, and we want to hear your thoughts on it.

Senator D'Amato.

STATEMENT OF HON. ALFONSE D'AMATO, U.S. SENATOR FROM THE STATE OF NEW YORK

Senator D'AMATO. Mr. Chairman, first of all, let me thank you for the opportunity of presenting to you some thoughts on S. 2471, and I would like to thank the Commission for giving me the opportunity of interrupting what I found to be a very interesting hearing on the operation of the NRC and on how it can be improved. Let me commend, Mr. Chairman, for holding these hearings.

I am going to take the liberty, Mr. Chairman, if I might, to ask that my testimony be submitted for the record in its entirety, and I would like to highlight several issues it raises.

Senator SIMPSON. Without objection, so ordered.

Senator D'AMATO. Mr. Chairman, there is no doubt that what took place at Chernobyl certainly has had an impact throughout the world, and it has prompted various nations of the world looking at their own situations with respect to the adequacy of regulation, the adequacy of inspections, et cetera. Certainly, coming from New York, and particularly from Long Island, this has some immediate concerns to those who live on the island and to those who are concerned with the facility at Shoreham.

There is no escaping that. We have to be candid when we talk about it. I think that some of the events that have transpired at Shoreham bring to light the need for the provisions spelled out in S. 2471.

It seems to me that when we talk about an emergency evacuation drill, there are those who believe it is not really necessary. There are those who believe that we are not really going to have a problem with these plants as designed. There are also those who believe that, although it is something that we have required, we really do not have to have a drill.

We have already cut back from having one drill required annually to one drill every 2 years. One of the provisions contained in S. 2471 requires that a drill be conducted on an annual basis. Indeed, the drill must ensure that people can be safely evacuated. We must not have a situation in which FEMA doesn't certify as to its ability to get people out.

What do we have a drill for, then? There is a gaping hole in the legislation that exists at the present time, and I would suggest to have a drill with no meaning, as the law now permits, is simply wrong and unjust. Peoples lives are at stake. We must have a procedure that is implemented to the best of our ability. Yes, people can be moved if there is an emergency, and they can be moved safely. But only through an adequate drilling procedure can this be ensured.

An adequate drilling procedure doesn't exist today, and one of the things that we ask for would be to require FEMA to conduct an annual test of the evacuation plan for each operating nuclear power facility in the United States. As I said, currently, these tests are conducted every 2 years, even though once-a-year testing was required until last year.

In addition, we require that as part of the licensing procedure for every commercial nuclear power facility, FEMA must make a finding that the public safety can be assured by the evacuation plan; otherwise, why have a drill?

We had a drill on Long Island, at least FEMA says that we had a drill. Just about no one participated. The question was then raised as to whether or not the drill was adequate, and the regional director there would not certify to the drill's adequacy. Consequently, he was given a choice; either he remove his statement that the drill could not assure public safety, or he resign. He resigned, and I commend him for that, but I think that we have to see to it that this situation does not recur and that this assurance be written clearly into the law.

Second, in S. 2471, we required that the utilities bear all non-Federal costs associated with the annual testing of the emergency evacuation plan. Why place that cost on the local communities? We complain now that local communities may not be participating, but there are some costs involved, and those costs can be quite high. The local taxpayers shouldn't be forced to pay them. Currently, these costs are often borne by State and local governments, and that really comes down to the homeowners. Why shouldn't the utilities have to pay for all of those costs?

I think that those two features of the bill I've discussed really go a long way toward making the application process something meaningful.

For a moment I would like to touch upon the first part of the bill, particularly as it relates to the creation of the position of inspector general at the Nuclear Regulatory Commission. That position would be appointed by the President, and confirmed by the Senate. The President would be required to appoint a candidate with expertise in nuclear safety issues. It combines the functions currently performed by two offices at the NRC: The Office of Inspector and Auditor, and the Office of Investigations.

In addition to the customary authority provided all other inspectors general, such as management and efficiency audit responsibilities, the new NRC inspector general would also have the authority and responsibility to review all safety procedures at the NRC to ensure that the best available standards are being met.

The inspector general will make an annual report to the Congress regarding the adequacy of the standards. He or she would also be authorized to propose new regulations and modifications to existing regulations for the purpose of ensuring the public safety.

Mr. Chairman, I would like to point to some of the specific examples as to why I think it is important to establish the inspector general. We are all familiar with the fact that the NRC already has an Office of Investigations to examine charges of wrongdoing at nuclear power plants. This office, however, has been widely criticized. Many people believe that top NRC officials have sought to restrict this office, making it difficult for the Office of Investigations to accomplish its mission.

One of our NRC commissioners here today has already supported the concept of an inspector general at the NRC, and has been quoted as saying that "The agency has had a lot of trouble in dealing with wrongdoing. There has been too much of a closeness with industry."

I didn't say that, and I understand that you have to work with industry, but I think it is important, therefore, that you have that independent office.

Last year, Assistant Attorney General Steve Trott said, in a letter to NRC Chairman Palladino, that "senior personnel" at the NRC had displayed, "opposition as well as resistance to the detection and disclosure of deliberate wrongdoing by NRC licensees."

Former Commissioner Victor Gilinsky, calls the NRC "an agency of technical people, engineers who are not oriented toward dealing with wrong doing. They are uncomfortable in the role of policeman." We understand that, and I don't cast any aspersions on anybody. We are saying, let's take the situation and make it better. Let's have it operate independently.

Mr. Chairman, I would like to quote two paragraphs from the—no, I am not going to quote the Washington Post.

Senator SIMPSON. Good.

Senator D'AMATO. Was that a little plus there?

Senator SIMPSON. You bet.

Senator D'AMATO. Let me say this to you about a problem that came up which concerns the Detroit Edison Co. This case was sent to the Justice Department, and yet it took from October 1985, until June 1986. for the Office of Investigations to get the case through the senior staff at the NRC, to the Justice Department. This is just an illustration, and you or your staff might want to examine why it has taken so long.

As a matter of fact, it would appear that there is a necessity to see to it that we have an inspector general there who is independent and operative in the truest sense. We don't need top management competing in an area where I think we need absolute independence, particularly if we are going to keep face with the public.

The public is concerned, and the incident at Chernobyl solidified their concern that the possibilities of a disaster, are not just hypothetical. We had Three Mile Island, and now the Soviets have had Chernobyl. Therefore, I think, we must see to it that there is proper review of safety procedures by an independent body, and a person who can make those determinations. It is the watchdog that is absolutely necessary in many of our endeavors in Government, but particularly at the NRC. I think in that way, we keep face with the public. We tell them that we don't operate like the Soviets, that we have an independent watchdog that is accountable to the President, to the Senate, to the people of the United States, and is not afraid to rock the boat, if and when necessary.

Mr. Chairman, I thank you for giving me this opportunity of sharing these thoughts with you. I hope that with your support, if not all of S. 2471, certainly parts of it dealing with the inspector general and dealing with the necessity of making a determination of those drills would be adopted.

Senator SIMPSON. I really deeply appreciate it, Al, I really do. You have been more than attentive; you have been helpful on the Shoreham issue, following it closely, sharing your frustrations, and anguish, with regard to that terribly contentious issue, which still boils along in every sense.

I do appreciate what you are telling us about the IG. If we were to take that portion of your bill, it would be the first time that an inspector general had been established, for an independent regulatory agency, rather than just an executive branch agency.

The Safety Standards Review, I gather, and I will just ask this one question, is most of that based upon a fundamental lack of confidence in the ability of the NRC? If it is, just a swift thought from you as to the, perhaps, organization, or reorganisation, rather than just another layer of review?

Senator D'AMATO. Mr. Chairman, I think it goes beyond the fundamental capabilities of the NRC, and I don't question them. I think that, as one of the former Commissioners testified to, that the NRC is uncomfortable in the role of policeman.

With respect to the uses of nuclear power in our society, there are some who will say that nuclear power has no proper role to play. Given the contentiousness of this issue, the emotions that boil over, I think there is a special need to have that inspector general.

We pass no judgment with respect to adequacy or inadequacy. I am not in a position to make those judgments, but I do believe that we go a long way toward dispelling the doubt that exists, and that has been cast by members of the Commission themselves and even by the third ranking member of the Justice Department, Mr. Trott, who is charged with the responsibility of the various investigations, once they are sent to the Justice Department.

Senator SIMPSON. I thank you very much. It is very helpful. Your information and your bill will be considered carefully.

Senator D'AMATO. Thank you, Mr. Chairman.

Senator SIMPSON. Thank you, Senator D'Amato.

Senator Biden, apparently, is still delayed a bit. I hate to have the Commission go back and forth, but I have just a few more questions.

Continuing with the Commission; as I look at the list of actions of the Commission over the years, this is my responsibility, I have to be interested in the role of being a conscientious oversight congressional subcommittee.

In looking at things over the years, it strikes me that a surprising number of actions have been taken by notation vote, through a process called Commission Tracking System. In many cases, it appears that, obviously, these heavy policy decisions—

Here he comes. What happened, Joe, was the Amtrak shut down under the last law?

Senator BIDEN. This was not a technological failure, I just missed the train, so you can keep supporting Amtrak.

Senator SIMPSON. I am not going to.

I think, since we just had not really gotten into this dazzling answer I was waiting for on this question——

Senator BIDEN. You go ahead.

Senator SIMPSON. Let me go back to that one, I think it would be interesting to any of our colleagues.

The question is: I notice that a surprising number of actions taken by this collegial body under notation vote, and Commission Tracking System, and in many cases, the central policy decisions are never discussed by this collegial body in a collegial atmosphere.

You have already indicated, which I think is extraordinary, that in your report to Congress on Price-Anderson, which is one of the major policy issues of this year because of the reauthorization and the expiration of it, the Commission never met to discuss the issue.

In light of that, and other examples, I wonder whether anyone really truly believes that collegiality benefits the decisionmaking process for the public health and safety of the United States. How can that be?

Mr. Chairman, do you have a comment?

Mr. **Palladino**. Mr. Chairman, the thought that was going through my mind was to tell you a little bit more about what really happened.

A SECY paper may come down, and that is a proposal by the staff, and it will get a preliminary vote. Then we will get a memo that says, "I don't agree with this, but I will propose a different alternative." Then somebody will write back and say, "I disagree." We then get variations on a theme.

Finally, it will take someone walking the halls and trying to broker the positions of different people and seeing if you can't get a consensus. I must say that we suffer from the lack of an opportunity to get together and truly exchange our views without having to have our preliminary thoughts exposed to public scrutiny when they are still preliminary thoughts, and subject to modification as new facts or new pieces of information are made available to the Commissioners, or opinions or persuasive arguments are made available to other Commissioners.

I think that we suffer greatly from the lack of opportunity to do just that.

Senator **Simpson**. Admiral Zech, and then I will come back to Commissioner Asselstine.

Mr. **Zech**. I agree with the chairman. On the Price-Anderson specifically, I think that it is probably a pretty good example of how the collegial system does not work because all of us, on the Price-Anderson issue, were heavily involved in the issue and trying to determine in our own mind what place should play in that issue, and also what position we personally as Commissioners should take.

So there was a lot of thought given to that, and there was a lot of individual staffing of that issue, but because it was an issue that was on the fringes of our responsibility itself, at least as far as I was concerned, it was an issue that could well have been the perfect example of how, if we had a collegial body, we could have functioned.

We could have benefitted, I am sure, from Commissioner Asselstine's legal background on the issue. We could have benefitted from our other colleagues, and I could have benefitted from their various views, having discussed this over the years. It was a new issue to me on the Commission. They had all participated in the issue and had voted on it previously. It would have been helpful, I think, if we could all have gotten together and informally discussed, first of all, what position should the NRC take on this Price-Anderson issue. Is it public health and safety, and if so, how does it involve our responsibilities. To me that was a fundamental question that I wrestled with myself.

If we determined an answer to that question, then the next question is, how should NRC responsibly inform Congress or the American people as to what role NRC should play. My view on that was that it was important for Price-Anderson that the public be served, that prompt and adequate payment to the public be made. That is our role.

Now, how much the number is, that is certainly not my area of expertise, or any of my fellow Commissioners. But the fact is that our role on that issue, my belief was, to focus on the public and public service. So that was a perfect issue that we could have used for collegiality, but we did not, and we formed our own opinions, and eventually testified on it.

We did have a meeting, I believe, Mr. Chairman, on Price-Anderson, and it was more or less after the fact, we had been to Congress and had discussed the issue.

That is a perfect example, in my view, of how collegiality really should function, and how the public probably would have been better served, and how in accordance with our restrictive interpretation the public, in my view at least, was not as well served as it should have been.

Senator SIMPSON. What I would add, and then I am going to go to Senator Biden, and he will make his remarks. He can make them right here at the committee table.

America is deprived when you can't get in that room and have Jim Asselstine visiting with Admiral Zech. That is what I am talking about. I am not talking about the decision. I am talking about the discussion, and the interchange, and the action of five people who should be talking to each other. That is the grossness of the present situation, that you can't do that.

So it is silly to talk about diversity of background, and interest, that is absurd. Leave it out. It doesn't matter how diverse you are, you will never know it unless you read it in the Washington Post, and then you will know how diverse you are, and perverse.

Not to be able to sit down together is absurd.

Mr. ZECH. We just don't do that.

Senator SIMPSON. You don't, but you are either going to do that, or we will go to something where there is just one guy taking the flack, that is my thought.

Mr. PALLADINO. Mr. Chairman, may I just make one comment. We left you with the impression, except for what Commissioner Zech said, that we didn't have any meetings on Price-Anderson. I believe we did. I would like to make sure of what I am about to say, so let me suggest that I give, for the record, what meetings we did have on Price-Anderson, and what the general nature of the meetings was.

Senator SIMPSON. Yes. I would be particularly interested in whether the Commission itself sat down and talked about Price-Anderson.

Mr. PALLADINO. If my memory serves correctly, we had a briefing, and I think that we had a meeting.

Senator SIMPSON. Before the report.

Mr. PALLADINO. I will have to check.

Senator SIMPSON. I see three heads that say that there was no meeting before the issuance of the report. Is that correct?

Mr. ASSELSTINE. I believe that is correct.

Mr. BERNTHAL. It sounds like a majority.

Mr. PALLADINO. I will check the records.

[The following was subsequently supplied:]

The Commission held no meeting on the subject of its December, 1983 report to Congress entitled, "The Price-Anderson Act—The Third Decade," NUREG-0957, before providing that report to Congress. The first and, to date, only Commission meeting to discuss the contents of that report was held June 10, 1985, in the context of considering the Commission's position on renewal of the Price-Anderson Act.

Senator SIMPSON. Commissioner Asselstine.

Mr. ASSELSTINE. I think that all of the major policy issues that have come before the Commission in the past few years really have been the subject of fairly extensive Commission meetings. When I look at the discussion on Indian Point, and things that went on literally for months. We had discussions about the Three Mile Island restart. We had discussions about the severe accident policy, and discussions about the backfitting rule, discussions of the source term, and decommissioning, the soundness of our enforcement policy. We had meetings with the advisory group on the soundness of our enforcement policy.

We had numerous meetings about emergency planning, all of the major policy issues that I can think about over the past several years have been the subject of fairly extensive commission meetings and discussions.

Notation voting, and voting by paper is useful for more minor matters where you really don't have to sit down and discuss items. If you are concerned about whether a fine is an appropriate level, or whether you want to boost it up another $10,000 or $20,000, you don't need to have a Commission meeting to do that. I think that we can express our views in writing on those small matters, and they can be closed out.

I really think that our major policy matters are really discussed and are discussed fairly extensively. Price-Anderson is a somewhat special case. I said earlier, in hindsight, I wish we had had a meeting on Price-Anderson. When the staff approach came up in 1983, I didn't need a meeting because I thought the staff was right on the mark. I thought that they had come up with a creative way to provide additional compensation for the public that would not put the industry out of business. I thought that what they had done was just about right.

I had some concerns about the wording of some aspects of the report, and I proposed a number of revisions to that. We circulated it around to the other Commissioners. Everybody bought off on those at the time. Commissioner Zech was not here.

In hindsight, I wish I had said, we really need a meeting to pin everybody down and make sure that everybody is really comfortable with what we are voting on. The fact is, everybody voted for it. After that, about a year or so later, the industry started coming around to see us. The industry said, this is terrible what you have recommended to the Congress. It is going to put us out of business, and it is going to mean the end of nuclear power. We are going to fight it, and we will kill it. That is what they told us. Right after that, two Commissioners changed their mind. Commissioner Zech voted at that point, and the Commission reconsidered its decision.

In hindsight, maybe a meeting would have flushed out some of those issues. I sort of doubt it myself, but if a meeting would have been a good idea, I would have been all for it. But I am not sure that Price-Anderson stands out as a great example of the way the Commission's deliberative or collegial decisionmaking process could have worked, quite frankly.

At least, on Price-Anderson, if I had to do it over again, I sure would have asked for a meeting to pin everybody down at the outset.

Senator SIMPSON. Let me go to Senator Biden, and then we will come back.

Senator BIDEN. That is all right, Mr. Chairman, I am interested in this, too.

Senator SIMPSON. I thought you had an 11 o'clock appointment.

Senator BIDEN. Yes, I do. I might as well sit down here and ruin their reputation. I don't think that they will want to associate with me in this regard.

Senator SIMPSON. Let me thank you for coming. I have learned that this is a very thoughtful legislator. I serve on the Judiciary Committee, and Senator Biden is the ranking member. He does a superb job. Again, he has presented us with a thoughtful piece of legislation, the Nuclear Safety Board Act of 1986. It is a thoughtful proposal, and I would like to hear your views on it.

STATEMENT OF HON. JOSEPH R. BIDEN, JR., U.S. SENATOR FROM THE STATE OF DELAWARE

Senator BIDEN. Thank you, Mr. Chairman.

I would like to thank the Commission members for allowing this interruption.

I would like to ask, Mr. Chairman, that the entirety of my relatively brief, but longer than I would like to take of your time, remarks be placed in the record, and let me attempt to summarize them.

Senator SIMPSON. So ordered.

Senator BIDEN. First of all, Mr. Chairman, I do not suggest that I know nearly as much about this area as I do about the judicial process, nor do I suggest that the piece of legislation that I have offered to the committee is an answer to all of the problems that face the Commission, but more importantly the industry, and the whole question of safety and public confidence, but I do think that it is a positive proposal.

As you know, Mr. Chairman, this hearing on the proposal to reform the structure of the Nuclear Regulatory Commission has brought about, under your leadership, a critical examination of our regulatory rules regarding the nuclear industry, and I support your efforts.

We may need to make some major changes, in my view, in the NRC so that it can carry out its responsibilities more in line with what I always thought was its function.

As you know, the legislation introduced is designed to establish an independent Safety Board for the NRC. Rather than discuss the details of the bill today, I would like, instead, to talk for a few minutes about why the creation of a Safety Board is, in my opinion, an appropriate response to the current safety problems.

The Safety Board, as you well know, Mr. Chairman, is not a new proposal, and I take no pride in authorship. It is not something that I thought up or my staff thought up. It has been gaining increasing support, I believe, in the nuclear community as recurrence of accidents at nuclear plants has indicated a need for improvements in the present regulatory structure.

Frankly, I don't think we have, in the Congress, recognized the value of the Safety Board. During the existence of the Atomic Energy Commission, Chairman Dixie Lee Ray took a tentative first step in splitting the responsibility for regulatory safety from other agency duties in 1973. Unfortunately, the Safety Division was not yet firmly established when the Commission was reorganized the following year.

The need for an independent board remained after the creation of the NRC in 1974, but it did not move back into the spotlight until the Kemeny Commission, in its report on Three Mile Island, recommended, and I quote, "an Oversight Committee on Nuclear Reactor Safety to examine, on a regular basis, the performance of the agency and the nuclear industry."

Last year, a report on the NRC's safety and accident investigation practices, prepared by Brookhaven National Laboratory for the NRC, recommended "an investigatory system patterned after the National Transportation Safety Board to determine the cause of events and recommended improvements."

Time and time again, when the safety commitment of the NRC is under scrutiny, observers reach the same conclusion, that a board devoded solely to safety needs to be part of the regulatory structure. So far it has not been done, and the NRC has not yet put in place this type of Safety Board called for by the two reports mentioned earlier.

After the Brookhaven report, the NRC tried to address the problem by establishing ad hoc investigatory teams to lead reviews of major accidents at nuclear plants. The initial reports were an improvement on earlier practices in my opinion, but too many of the underlying problems that have plagued the NRC for more than a decade have remained, I believe, uncorrected.

The NRC staff is still investigating its own role in accidents, and the public still doubts the commitment to safety, and the permanent mechanisms to push for safety improvements, in my view, are still missing.

The creation of the independent Safety Board cannot ensure that pumps will work, or that valves will not get stuck, but these occurrences are often the symptoms of larger problems. The Safety Board goes to the root of most of the accidents at our nation's nuclear power plants—an inadequate concern for safety that allows for faulty pumps and valves, and management practices that continue even after they have been recognized.

I want to make it clear, to steal a phrase from another report on another matter, that the "launch first, and safety second attitude," if I can borrow that phrase from the Challenger investigation, is not an attitude that suddenly appeared with this Board or this administration, or in the last couple of years.

For years there has been a slow, but relentless, in my opinion, shift away from safety in the Nuclear Regulatory Agency brought on by some very significant reasons, not the least of which were financial, and the energy crisis that we went through, and I guess at some day in the future go through again, unfortunately, as we take some steps that we have not thus far taken.

I would like to point to three clear examples of NRC actions that in my view run contrary to what most of us laypersons would consider priorities. I doubt if anyone outside of this hearing room knows anything about these actions, but I am sure that the public would be somewhat surprised at what has been going on in the nuclear industry in this country.

It is a little-known fact, as you all know in this room, but a little-known fact outside of this room, not because anybody has attempted to hide it, but because it is just not very well known, that the earlier smaller nuclear plants were designed with the objective of ensuring that the reactor containment structure would function as an effective, independent barrier against the release of harmful radioactive substances even if the reactor were to suffer a meltdown of the core.

Quite frankly, to reveal my ignorance, Mr. Chairman, ten months ago, when I started to pay more attention to this subject because, I might add, of a parochial reason, the Salem Nuclear Reactor across the river, which blows my way, a mile and a half away, I assumed, as I think most Americans assume, that the way nuclear powerplants are designed today was as they were originally designed, and that is with the notion that this independent barrier would work as a buffer even if there were a mere meltdown.

However, as you know, and everyone in here knows better than I, as the industry pursued economies of scale to develop larger and more powerful plants, it became apparent that containment failure would be the likely consequence of a full meltdown of a core of a larger reactor.

At that time, the Atomic Energy Commission and the industry decided to give up on the conservative design requirements that had been applied in earlier smaller reactors, dropping a stronger definition of containment that most people, I believe, in this country still believe is in effect today.

Under the new interpretation, the larger reactor containment vessels would not be required to withstand a full core meltdown, and it would assume that other safety systems, which have been improved, other safety systems in the plant would work properly to prevent core meltdown. The core meltdowns would be so unlikely that it would be considered incredible.

The Three Mile accident proved that that is not the case. The accident gave us an opportunity to reassess the risk of serious nuclear accidents, and in particular to reconsider the need for additional measures to prevent meltdown and large radiation releases.

The Kemeny Commission, which looked into the accident, strongly recommended such a change. The NRC made a good beginning, in my view, in its reassessment of the meltdown risk at U.S. plants, but somewhere along the way the initiative waned. Several decisions last year lead me to believe that the NRC and the nuclear industry have returned to the old attitudes of unsupported optimism that were so evident before the Three Mile Island accident.

Another example is a decision regarding the severe accident risk at the Indian Point plants in New York. Despite projections of severe consequences from a meltdown at the Indian Point plant involving the release of radiation, and despite longstanding difficulties in providing adequate emergency planning for the heavily populated area around Indian Point, the Commission declared the two reactors to be acceptably safe. All of the proposed safety improvements for the plant, including the relatively straightforward safety improvements urged by the NRC's own technical staff and hearing board, were rejected.

According to the NRC staff, these improvements would have cut severe accident risks at the Indian Point plant in half. This decision prompted a critical letter from five members of the Commission's Advisory Committee on Reactor Safeguards. The NRC's own advisors believed the Indian Point decision ran into direct conflict with efforts to reduce the risk of severe accidents.

Compounding this decision, the Commission then declared all plants acceptably safe for the foreseeable future, and ended further efforts to develop new safety features for plants that would substantially reduce the risk of meltdown. It seems to me the message to staff was unmistakable, and that is, the Commission is not interested in ideas from staff on improvements to safety.

The final decision, and I will end in a moment, Mr. Chairman, the final decision was the adoption of the backfit rule which restricts the NRC's ability to impose safety requirements on existing plants. The effect of the backfit rule is to create a series of procedural obstacles, in my view, to backfitting existing plants.

By requiring the agency to prepare cost/benefit analyses, and requiring a demonstration of substantial overall improvement in safety, the new backfit rule shifts the burden of proof to the proponents of nuclear safety.

This decision effectively overturns a policy in support of a new safety improvements advocated by the President's commission on the Three Mile Island accident. The backfit rule, in my view, guts the policy by stacking the deck against improved safety by including in the cost/benefit analyses every conceivable cost of safety improvement.

I had to be educated on this, Mr. Chairman, and I asked two staff members to spend some time with me on this. It seems like every conceivable cost was included, but it seemed to fail to include such obvious benefits, in this cost/benefit analysis, of avoiding contamination of public property and preventing the loss of the plant itself, and the costs attendant to that.

I didn't see anywhere in the report where there was a great discussion about what would be the cost of cleanup, what would be the cost to the public and to the taxpayers. So in this cost/benefit ratio, as we always do, and we do it in this body, if it benefits us to consider costs on one side, and benefits not to consider benefits or costs on the other side, we tend to do that.

In my humble opinion, Mr. Chairman, not proposing myself as any expert, it seems to me as a layman that there are big chunks that have been left out in determining this.

Recent operating experience at our own nuclear plants demonstrates that there is no reason to adopt a feeling of complacency toward nuclear safety. Serious mishaps occurred at several plants last year, as you know, Mr. Chairman, better than anyone in this room, including the Davis-Besse plant in Toledo, the Rancho Seco plant near Sacramento, and the San Onofree near San Clemente, and two plants in the Tennessee Valley Authority System.

The subcommittee is familiar with these mishaps, which have shut down 8 percent of our Nation's operating plants by the end of last year. Despite many changes that have been made since the Three Mile Island accident, these mishaps stemmed from such problems are multiple equipment failures, complete loss of safety systems, and simple human error.

Recent actions by the Commission and industry, in my view, cannot be squared with the operating record of the nuclear plants last year. The high standards for safety the public assumes at present are being quietly dismantled, not all, but many.

The key to the future of nuclear power is performance, and at a higher level of excellence than presently exists. The Brookhaven report cited the inability of the NRC and the industry to learn from their operational experience. This is understandable since industry and NRC's technical staff have to be critical of their own performance to get at the root of the cause of the accidents. It is human nature, it seems to me, not to do that. I am not impugning anyone's integrity, but I think that it is just human nature. That is the way that it seems to function. Unbiased investigations simply cannot be expected on a reliable basis, in my view, under the current system.

Mr. Chairman, in conclusion, the Chernobyl accident, combined with the closure of many of our Nation's nuclear plants for safety reasons, just like the Challenger accident and the near shutdown of our Nation's space program has shaken the public's confidence—rightly or wrongly—in our ability to control technological advances. The creation of an independent safety board, although not a total step, a small step, I believe is needed to help begin to restore the public's confidence that the complexities of nuclear technology are understood, and to redress the drift, in my view, toward regulatory complacency in the face of recurring serious mishaps to the contrary.

Mr. Chairman, I urge the subcommittee to support S. 2291 as an important first step toward achieving a level of excellence that we all seek. I thank you for the opportunity, and if you are so inclined, I will be delighted to stay for questions. If not, I will be delighted to come back.

I know that you accommodated me by moving me in the middle here, so I will move at your disposal, Mr. Chairman.

Senator SIMPSON. Joe, thank you very much. This is very helpful. I don't have any questions, and if we do develop those, I will be back to you, to visit with you as we proceed. I appreciate it very much.

Senator BIDEN. Thank you very much, Mr. Chairman.

I thank the Commission members for allowing me to interrupt.

Senator SIMPSON. Just a couple more questions, and then I think we will have Mr. Rogovin and Mr. Behnke come to the table when we finish with the Commission. I will stay a few more minutes than I had intended so that we will have the full benefit of their views.

I just want to ask the Commission a few more questions.

When we talk about the Commission meetings that are held, and they are held on major policy issues, are those held for the benefit of forging a collegial consensus, or are they held simply as a forum and platform for the expression of individual Commissioners' views with gusto?

Mr. PALLADINO. Mr. Chairman, at the risk of being wrong, I will try to answer the question. I think that we have had it both ways. I think that sometimes we have met to honestly debate the issues. The problem is that sometimes there is reluctance to be as candid as one would hope we would be when these meetings are public.

I think sometimes we have held meetings because a Commissioner felt that he wanted more information on a particular issue, and sometimes a Commissioner wanted an opportunity to express a particular opinion which I think was valid for him to express, because I think that that contributes to the collegial process.

What I am having difficulty with is to ascribe motives as to why people vote for a meeting, and I think that it covers the entire range of purposes for having a meeting.

Senator SIMPSON. Let me ask you this. We hear this potential for undue executive branch interference, that seems to be a signal of what would come here, and presumably to the detriment of safety and human health, nuclear safety. Then I look at EPA, FDA, or FAA and I do not see in any practice there the kind of adverse influence that people seem to be concerned about.

What is it about nuclear matters that is any different from the health and safety functions that these other executive branch agencies carry out, and by and large do it very efficiently, certainly compared to this, and do you share this concern about this undue executive branch interference?

Mr. ASSELSTINE. Mr. Chairman, I don't think that any of us have suggested that this is a concern.

Senator SIMPSON. Undue executive branch interference was mentioned.

Mr. BERNTHAL. There certainly has been that accusation that in part came from the other body on Capitol Hill.

I agree with Commissioner Asselstine, it is nonsense. If anything, there is too little communication with the executive branch. If there is any tendency to get into the day-to-day workings of the NRC and influence those workings, I am sad to say that it seems to come from the other end of Pennsylvania Avenue, not from the White House.

Mr. PALLADINO. I agree with both Commissioner Bernthal and Commissioner Asselstine on that point.

Mr. ASSELSTINE. On this efficiency point, though, I really think that it is useful to look, for example, at how EPA has discharged its radiation-related responsibilities, and how the NRC has discharged its responsibility, particularly in that overlap area.

I agree with you that the overlap is a concern, but in all too many instances I think the situation has been that the NRC has acted literally years before the EPA has gotten around, through its inefficient process, to reach a decision on what it is going to do, and then that, all of a sudden, upsets the applecart. That is what happened in mill tailings. That potentially could have happened in the high-level waste area, and that is certainly what we are concerned about in the low-level waste area.

If anything, I think the experience shows that we get our job done pretty efficiently, but EPA sometimes takes a great deal longer to get the decision made. I wonder whether it is getting the attention of a single administrator to a small portion of his activities, whether that might be a problem with that organization.

Senator SIMPSON. As I said, one of the things that is apparent to me is that the EPA slowly intrudes on things where there is not activity and action of the NRC. I am seeing more and more of that.

I think that other things that are said in opposition to the single administrator, and there are many, ironically that one is one of them that is going to bring executive branch interference, and it is somehow going to interfere with public participation.

I think of EPA's radon rule for mill tailings under the Clean Air Act that kind of goes in the other direction, but then they talk about the politics of the Agency will shift. This is the one that gets to me, if you have a single administrator, the politics will shift, you will have different Presidents appointing different administrators with fundamentally different views. Yet, you look at the other agencies of Government, the heads of the agencies have come from the mainstream of the regulatory community on balance. We have the horror stories, and then everybody hangs around those all day long, and forgets what actually does get done.

I do not think that there is a potential for violent changes in policy direction. But there is lots to be done, and I regret that I have another enqagement and I must go on, I want to go to those two fine gentlemen who have been waiting.

I want to say one thing, as you, Mr. Chairman, go on, this is a moment for me to pay special tribute to you, sir, and deep appreciation for you. You will be leaving the Commission at the end of this month, and this will be your final opportunity to appear before this subcommittee, and my last formal opportunity, as chairman of the subcommittee, to have heard your views.

You have appeared here a good many times, you have been a most patient man, and on a wide variety of subjects. On every occasion, you have conducted yourself with great distinction and rare sincerity. You have represented your agency with great skill, and you have served your country well, as Chairman of the NRC, a terribly difficult job. I just want to express that we owe you a great deal, sir, for the steady hand that you have used in guiding this agency over 5 years now.

I personally will miss your good counsel. I know that you are looking forward to a more normal life, and I certainly wish you the best, you richly deserve it. It has been a pleasure to come to know you, and I look forward to visiting with you continually on these issues.

Mr. PALLADINO. Thank you, Mr. Chairman. I appreciated the opportunity to work with your various committees, and I have learned a great deal about how our Federal Government works. Let me say, despite all the shortcomings that we point to in the way we work, I would rather have it this way than many other forms of government that I see in action throughout the world.

May I take the opportunity to make just one observation? I have been reflecting about some of the comments that Senator Biden has made, and I think that some of the questions he has ought to be corrected, if we possibly can. If I may, I would like to reserve on behalf of the Commission an opportunity to submit, for the record, any corrective material that the Commission may feel is appropriate.

Senator SIMPSON. Without objection.

Mr. PALLADINO. It may not be done before I leave, but I think that it might be appropriate to have it done within the near future.

Senator SIMPSON. Thank you very much, Mr. Chairman.

Thank you very much to the Commission. I appreciate your being here, it is always helpful.

Now, Mitchell Rogovin of Rogovin, Huge & Stern of Washington, DC, a former director of the special inquiry group investigation of the Three Mile Island accident, and Wallace B. Behnke, vice chairman of Commonwealth Edison, Chicago, IL.

It is good to see you both. I am just going to put you there together. You have met on an occasion or two. It is good to have your views.

I remember very well, Mr. Rogovin, as a very freshman Member of the U.S. Senate, reading your very thoughtful report in 1979 as the ranking member. It was a very thoughtful piece of work, and I was very impressed with it, and with you.

Mr. Behnke, you have testified before us in the past and it is always well expressed.

You do have a time limit, and I will let each of you speak, and then I will come to questions. Please proceed.

STATEMENT OF MITCHELL ROGOVIN, ESQ., ROGOVIN, HUGE & LENZER

Mr. ROGOVIN. Mr. Chairman, I am grateful for the opportunity to appear and testify before the subcommittee in support of all three bills.

I received my impressions of the Nuclear Regulatory Commission during the aftermath of the Three Mile Island accident when I was asked by the NRC to direct an inquiry into the accident. As was pointed out, one of the findings that we reached was that somewhat colorful phrase, ". . . that it wasn't an organization that is so badly managed, as it is not managed at all." This was not merely an observation, it is a reality.

Mr. Chairman, it is a reality, but not as a result of the Sunshine Act because before the Sunshine Act was ever enacted, the NRC was not manageable. I believe that the Sunshine Act creates some serious problems for the Commissioners, and I regret that. It would be nice to believe that they could handle the job in an open collegial fashion.

The fact of the matter is that the Sunshine Act is intended to allow the public to hear and participate in decisionmaking. The crux of the problem, however, is not so much with the Sunshine Act as it is with the concept of Commission governance for the Nuclear Regulatory Commission.

The roots of the problem, as I view it, are historical, statutory and personnel related. As has been noted, both the Kemeny commission and our inquiry group recommended the abolition of the Commission form of governance.

The concept, during the AEC period, was that the Commission would function as a collegial body; but the fact of the matter is, as your questioning demonstrated this morning, it doesn't function as a collegial body, whether as a result of the Sunshine Act or the predisposition of its members.

What we have, at least at the time that I was familiar with the Commission, were five equally powerful Commissioners who had over the years developed feudal baronies and independent fiefdoms over which they presided. It is as if each Commissioner had 20 percent of the stock of the corporation. It was a classic deadlock arrangement.

In 1980, there was a modest reorganization that took place, certainly a clearer chain of command came about. But the advantages of collegial bodies exist only in theory, and nothing in the reorganization of 1980 helped to strengthen the management concept.

The Chairman still cannot control his agenda. We should be thankful for the fact that the Chairman has gained control in emergency situations. It was hard to believe that he did not have such control, yet that was the way that the structure existed.

One aspect of the NRC that the committee should examine is the fact that it is still scattered all over the Metropolitan Washington area. This is significant. It shows that the Commissioners are unwilling to leave the downtown Washington location where there is not enough room for the staff and the Commissioners are unwilling to go out to the suburbs where the staff is housed. I think that it is extraordinarily difficult to manage when it takes 1 or 1½ hours for the people in question to be in physical contact with one another.

The relationship of the Commissioners, in the period of time that we had to observe them, were described as not unlike those between sovereign nations. The Commissioners acted cordially to one another, somewhat distant, and conducted for the most part their affairs in writing, but always with the requisite formalities.

I don't believe that much has changed. We heard about those formalities, and the inability for the Commissioners to sit down and to discuss their own problems, and an opportunity to give some direction to their Commission.

Most of the recommendations that we made 6 years ago regarding organization, licensing, design, training, siting, evacuation planning, and oversight, remain dormant. There has been a great deal of talk regarding change but the change has been painfully slow, and the Commission is the entity that would bring change to bear.

Indeed, in the 6 years, from the time we made our recommendations to the Nuclear Regulatory Commission to this date, no one from my group has ever been called down by the NRC to further discuss any of our recommendations.

Senator **Stafford**. Mr. Chairman, may I interrupt for just 1 second?

Senator **Simpson**. Indeed, Mr. Chairman.

Senator **Stafford**. I am aware, as chairman of the full committee, we have had a problem with getting the NRC and the staff in one building. It has been an ongoing problem for us since we have jurisdiction over Federal buildings of any significant size. Buildings are going to be available for the NRC and its staff in Maryland, and I think that the first part of that move is going to occur over the next several months.

I realize that bringing them together may be a critical mass that will explode instead of working together, but at least the move is going to occur.

Mr. **Rogovin**. I think that they deserve the opportunity, at least, to try living together. Estrangement never brought any marriages any closer.

We have heard the arguments in favor of maintaining the commission form, and they all tend to be premised on the concept that there is a diversity of views, and somehow the public will be precluded this opportunity to hear the diversity of views.

I think the fundamental problem of the NRC has been its attempt to resolve competing public attitudes about nuclear power. This ought not to be a Commission function; it is a congressional function. Congress has given a legislative mandate to the NRC, and the NRC, through the Commissioners, or, hopefully, in the future through an administrator, should be in pursuit of that mandate. To the extent that there is a public debate about nuclear power, it belongs here in the Halls of Congress, and not constantly in the halls of the Commission. Commissioners in the past, who have had very strong antinuclear attitudes, have served on that commission and have used the Commission as a vehicle to put forth their views. I think decisions about the ultimate safety objective in the regulatory program, and about the expansion or reduction of our country's reliance on nuclear power—decisions which inevitably require a balancing of risks against the benefits of technology—should be made by the Executive and Congress, as part of the Nation's overall strategic policy. The administrator would be at the NRC to "administer"; to follow the dictates of the Congress and the Executive. I think that those views are better set by the Congress, and the administrator is there to administrate, to follow the law, and the enactments of the Congress.

The NRC has a history of nonmanagement and lack of leadership. The lack of the so-called diversity of the collegial approach must be weighed against the potential of effective management. From my point of view, effective management has to win every time. The opportunity for collegial attitudes or different views on the public policy is a congressional one.

With respect to the independent Nuclear Safety Board, the group that I directed, the Special Inquiry Group, came about because the Nuclear Regulatory Commission recognized that it did not have sufficient confidence that the public would accept an internal inquiry into Three Mile Island. I suspect that that is a continuing problem, and believe that Senator Biden's proposed legislation——

Senator **Simpson**. Mr. Rogovin, I don't mean to be rude, but I have to go in about 10 or 15 minutes at the most. Senator Stafford has graciously agreed to stay on to ask some questions.

If I could have Mr. Behnke's statement while I am here, and then ask a couple of questions. I regret that I must go on, and I apologize, sir.

STATEMENT OF WALLACE B. BEHNKE, VICE CHAIRMAN, COMMONWEALTH EDISON

Mr. BEHNKE. Thank you very much, Senator. I hate to interrupt the very interesting and informative discussion by Mr. Rogovin.

Senator SIMPSON. We were just getting to the nub of it, too.

Mr. BEHNKE. I very much appreciate the opportunity to appear again before your subcommittee. I am appearing today on behalf of the Atomic Industrial Forum, the Edison Electric Institute, and the American Nuclear Energy Council.

With your permission and in the interest of time, I would propose to quickly summarize my prepared statement, copies of which have been provided to your committee, and ask that this might be included in the record.

Senator SIMPSON. Without objection, so ordered.

Mr. BEHNKE. Mr. Chairman, we applaud your personal efforts to start reducing the needless economic waste and inefficiency that has crept into the nuclear regulatory process, and especially the introduction of S. 1235, the Nuclear Regulation Reorganization Act of 1985, and your support of legislation to encourage plant standardization and licensing requirements as major steps toward achieving stability and predictability in the nuclear licensing process.

We are also pleased, Mr. Chairman, that you recognize that the factors that contributed to the tragic accident at the Chernobyl IV reactor in the Soviet Union are not present in the United States, and therefore have not allowed the accident to distract you from addressing the longrun solution to the licensing problem.

The EEI noted last year that, unfortunately, under present regulatory and institutional arrangements, no American electric utility would consider ordering a new nuclear powerplant, and that has not changed.

The licensing and regulatory processes have contributed to the loss of nuclear power's economic advantage, and the financial risk attendant to the process is more than any utility could handle.

The Nuclear Regulatory Commission, reportedly, has been frustrated by its own organizational structure in its attempts to take timely action on important issues. Congress has the authority to rectify to a large extent this unsatisfactory situation. S. 1235, the Nuclear Regulation Reorganization Act of 1985, and S. 2073, and S. 2373, the Nuclear Facility Standardization Act of 1986, provide excellent vehicles for addressing our concerns with the NRC organizational structure and the licensing process.

The question of organization restructuring of the Commission has been carefully studied by knowledgeable people, both in and out of government. Appended to my prepared testimony is a recently completed report, prepared by the Edison Electric Institute by Marcus Rowden and Sam Fowler, serves as a basis for our position on this matter.

We believe the single administrator form of regulatory management offers several distinct advantages over the Commission structure—improved management, improved policy formulation, and clearer accountability.

Two major criticisms have been leveled at the single administrator approach to NRC management—loss of diversity in agency decisionmaking, and less public visibility of the regulatory process. There are persuasive responses to counter each of these criticisms which I have included in my complete statement.

You are also considering S. 2291, a proposal for a completely independent Nuclear Safety Board, with a broad mandate to investigate events, review regulatory activities, and recommend improvements to licensing and regulatory practices.

As proposed, the functions of this proposed board would duplicate the investigative functions currently being adequately performed by the Commission staff and, therefore, would needlessly create yet another layer of regulation.

While some form of Nuclear Safety Board may be appropriate in conjunction with a single administrator form of regulatory organization, the board proposed in S. 2291 appears to be inappropriate because of its duplicate regulatory functions.

Another proposal, S. 2471, would establish an Office of Inspector General within the NRC. To the extent that creation of such an office would be consistent with the Inspector General Act of 1978, responsible for the functions of investigating possible waste, fraud, and abuse within the agency, the merits of such a proposal should be addressed by the NRC, rather than the nuclear industry.

However, the special provisions proposed in S. 2471 appear to present a significant departure from the conventional role of an inspector general. These provisions appear to establish yet another needless layer of regulation. Such a role appears to be inappropriate for the Office of Inspector General.

In addition to S. 1235, we believe the use of standardized plant designs which have been preapproved by the NRC will contribute to restoring economic feasibility of nuclear power. The recently completed position paper on standardization, prepared by the AIF Study Group on the practical applications of standardized nuclear powerplants in the United States, goes a long way in defining what is meant by nuclear plant standardization, and how the concept would be implemented.

Congressional passage of S. 2073 and S. 2373, the Nuclear Facilities Standardization Act of 1986 is needed to cause these actions to occur.

Mr. Chairman, earlier this year, a major milestone was reached in the licensing of the hundredth nuclear powerplant. Ninety-three of these nuclear energy powerplants have achieved commercial operation, and more electricity was produced by them in 1985 than from all fuel forms combined in 1950. We are committed to operate these plants safely and efficiently.

Nuclear power is critically needed to assure the long-run of availability of reliable, safe, and clean electric power at reasonable prices. We have lost the ability to make future commitments for its use, and this must be changed. We are here today to urge you to report out S. 1235, the Nuclear Regulation Reorganization Act of 1985, as well as S. 2073 and S. 2373, the Nuclear Facilities Standardization Act of 1986, and to work for their passage in the full Senate.

Thank you for this opportunity to present our views, and I would be pleased to answer your questions at your pleasure.

Senator SIMPSON. Thank you very much.

Let me ask, Mr. Rogovin, as you submitted your report to us on Three Mile Island over 6 years ago. In that report, and I quoted from it and you have remarked on it, there was a harsh criticism of the structure of the Commission and the notion of collegial regulation.

Now based on the experience, or nonexperience, of the last 6 years, including our experience with the special reorganization plan of 1980, could you please give us your views briefly on whether we are in any possible better position today, right now, than we were after the accident, in regulating nuclear power in the United States in a safe and effective manner?

Mr. ROGOVIN. The 6 years simply have been a lost opportunity. I think that the confidence level of the American people has been reduced substantially. I would like to think thought that a strong leader in a management role might have been able to be more effective in a regulation process, and more effective in bringing plants on stream in a more rapid fashion, and in some way restore the confidence of the American public in nuclear power. That is what I see as a loss.

Senator SIMPSON. Was the Reorganization Act No. 1 of that plan in 1980 effective in addressing any concerns that you and the Kemeny Commission had?

Mr. ROGOVIN. I felt that the reorganization plan was much like the Commission itself: a compromise. The Commission is the product of having five people with five diverse points of view. We saw the same thing occur when the reorganization plan came to Congress. It was pulled apart in lots of different directions.

Senator SIMPSON. I must say, it certainly must be frustrating to you, with the great work that you did, to see so little progress in such a long period of time. It is very identifiable as little progress.

Let me ask a question, Mr. Behnke. I want to thank you for your testimony and the detailed report on the management structure that you have submitted, that will be helpful. I was fascinated by the sharp difference between the regulatory framework that Congress established for nuclear matters, and the regulatory framework for other health and safety issues.

In fact, it appears that the NRC is one of the few remaining commissions charged with health and safety responsibility. From your remarks, it sounds like the creation of a commission for nuclear regulation was pretty much of a historical anomaly, rather than a well considered decision. Could you expand on that briefly?

Mr. BEHNKE. I would be very pleased to. The history of the formation of the Commission, of course, goes way back to the beginning of the first thoughts of a civilian nuclear power program. My recollection is that the issue of governance by a commission was first raised during the Kennedy administration in 1960. It was raised again, of course, very sharply in 1979 as a result of the Three Mile Island accident.

Again, again, and again, observers both in and out of Government have been critical of the collegial approach to managing a large technical responsibility such as the nuclear licensing process. The track record, throughout the entire history of the Commission, demonstrates that this form of governance has not led to what most of us regard as the most efficient and effective form of agency management.

What you have proposed, Senator, in your bill, we believe, would go a long way toward correcting this serious shortcoming.

Senator SIMPSON. One other question. In the interest of balancing the need for independent regulation against the proposal to replace the Commission with an independent single administrator within the executive branch, if you could comment briefly on the merits of a comprehensive package, if we were to do a regulatory package that would include the single administrator proposal, an inspector general that would combine the functions of the NRC's Office of Investigations and the Office of Inspector and Auditor, a factfinding Nuclear Safety Board, and standardization legislation.

Would an approach like that contain elements to restore credibility and effectiveness to regulation, while at the same time striking that balance between the executive and the legislative branches.

Mr. BEHNKE. Very good, Senator. As I indicated in my testimony, we believe very strongly that the passage of your proposals for a single administrator and the passage of the legislation providing for the use of standardized plant designs, preapproved by the NRC, would be very important elements.

I also indicated in my testimony that perhaps, in connection with the single administrator form, some type of a Nuclear Safety Review Board might be appropriate. However, we would feel strong that, were that to be the case, the purpose of that board ought to be to investigate serious events, and not become in any shape or form another layer of regulation, or another pulling and hauling type of organization within the complex network of nuclear safety regulation.

As for the inspector general concept, as I indicated, traditionally we would see that following its traditional role of dealing with fraud, waste, and abuse. Those are matters that probably ought to be addressed by the NRC, and I think that our industry would not have any particular concern if its activities are limited to those functions.

Again, to broaden that out to form yet another layer of regulation, more conflict, more diversity, we think would not be in the public interest.

Senator SIMPSON. Do you have any thought on that. Even though that comprehensive part of it is really not your bag, I would like your thoughts?

Mr. ROGOVIN. Mr. Chairman, I think the inspector general concept is a healthy one. I think the inspector general ought not to be a team player. He ought to be separate and independent. He ought to be someone who eats lunch separate and apart from everyone else.

Senator SIMPSON. They all do now, so you don't have to worry about that.

Mr. ROGOVIN. As far as the Safety Board on significant accidents—any time there is a significant accident, the Nuclear Regulatory Commission is one of the parties under investigation. It is very difficult for the agency to be sufficiently schizophrenic to separate out an investigative unit that can look at the organization's role and disregard the pressure of not being a team player. I think that the Safety Board is a very important function.

Senator SIMPSON. I want to thank you, and I want to thank the chairman, Senator Stafford, for being here, and pinchhitting. He not only pinch-hits, he leads cleanup, and pitches.

I thank you both very much for coming, it was very helpful. I may have further questions that I will submit in writing.

Mr. Chairman, I thank you very much for taking over.

Senator STAFFORD. I was very glad to do it. Let me express my appreciation to you, Senator, for all your work on this important subject on behalf of our committee.

Mr. Behnke, I am heartily in agreement with what you said about standardization of nuclear powerplants for the future. It seems to me that one of the serious errors that we have made in this country has been the constant change orders that have, in my opinion, contributed to the complexity of construction, the cost of construction, and all the delays in building plants.

It seems to me that standardization is the way to go if we are to have future nuclear plants. In connection with standardization, could I ask you how big the plants ought to be, in your opinion, 500 megawatts, 1,000 megawatts, or what?

Mr. BEHNKE. Senator, my view, first of all, is that standardization would be an extremely important step. I think that this will allow us to simplify the regulatory process. Preapproval of design would eliminate much of the uncertainty and second guessing, and changes that have taken place in the process. It would allow regulators and the utility management alike to concentrate on the important things rather than diffuse their efforts over a broad range of repetitive issues.

As to the matter of size, it seems to me that this ought to be primarily an economic matter. The important thing to the consumer is that he keep the cost of power down. The important thing to the public is that we keep the plants safe. There are optimum sizes for nuclear powerplants. Generally, the experience in this country, and supported overseas, suggests that plants in the 1,000-megawatt stage are probably technically optimum and economically optimum as well.

There may be special conditions in some areas that would argue for smaller plants, but these ought to be economic considerations. Perhaps, in the far distant future, it may prove out that we may want to have several size plants in the standard category, and not just a single plant. But I think that we ought to let economics make that decision for us.

Senator STAFFORD. All right, I don't think that I disagree with that.

Could I ask you also, since we have you here, what is the current thought on the life expectancy of a nuclear powerplant?

Mr. BEHNKE. What is the current thought on the life expectancy of nuclear powerplants, for book depreciation purposes, utilities generally are depreciating these in an approximately 30- to 33-year lifespan. I think those of us who work with these plants believe that the life expectancy on technical grounds of a nuclear powerplant could be much longer. In fact, we probably don't know enough yet to predict the ultimate life that a nuclear powerplant might enjoy from a technical and environmental standpoint.

One thing is clear and that is that the technical life and the economic life of these plants will probably be much longer than is the case with conventional coal-fired plants.

Senator STAFFORD. So, you won't have to speculate, but I can, let me say, would 50 years seem like a reasonable period?

Mr. BEHNKE. I would not think that that would be unreasonable at all. It may require some change out of certain key parts, but this is all within the realm of technical and economic feasibility.

Senator STAFFORD. Mr. Rogovin, would you have any comment on either of these questions?

Mr. ROGOVIN. Absolutely not.

Senator STAFFORD. All right, but this is a good place to comment, if you want to.

I might say, gentlemen, having sat through last week's with respect to burning fossil fuels for generating electricity, as well as driving automobiles, running large smokestack plants around the world, the escape of CO_2 and ozone from CFC's and nitrous oxides into the atmosphere, and the greenhouse effect, it makes a case, if anybody wants to think about it, for nuclear power somewhere in the future.

I would gather, with no new plants contemplated beyond those apparently about to be completed, at some time in the next 50 years—I guess I won't be chairman of this committee by then—sometime in that time period, we may have to take a hard look at nuclear power as the way to go, since if plants are designed well enough, they don't put anything into the atmosphere at all. This would suggest to you that I am still a believer in nuclear power despite what happened in Russia. I won't ask for your comments.

Mr. BEHNKE. Let me say, Mr. Chairman, that those of us who are responsible for the Nation's electric power supplies strongly support the notion of continuing to have the availability of the nuclear option. We believe that the prudent strategy is for a balanced energy mix of both coal and nuclear power at least over the foreseeable decades ahead. This country would make a very serious mistake in foreclosing the nuclear option for the additional electric generating capacity for the replacement of electric generating capacity that we are going to need in the later 1990's and beyond on any conceivable growth scenario.

Senator STAFFORD. I am in the minority in my part of the country in my views, but those are my views.

Mr. Rogovin, in your report on the accident at Three Mile Island, you found that the principal deficiencies in the reactor safety were management problems. You say here, "an attitude of complacency pervaded both the industry and NRC, an attitude that the engineered safeguards built into these plants were more than adequate, and that an accident like Three Mile Island would not occur."

You state in your current testimony that "the lessons of TMI are slipping from memory with each passing year." So, I ask you, do you think that an attitude of complacency, such as that existing before TMI, has been slowly returning or even is present in the industry today?

Mr. **Rogovin**. Mr. Chairman, I think that the focus of my testimony today was with respect to the Commission. I think that the industry has been working around the clock to make very, very substantial changes. There are some real leaders in the industry, and they have done a remarkable job.

One of the problems, is that there are some smaller plants with financial pressures on them, and they may not have the capacity to do the things that some of the leaders of the industry are doing. But from what I have been able to see in the last 6 years, the industry has done a very fine job in trying to remedy the problems that were surfaced during the Three Mile Island and post-Three Mile Island time.

Senator **Stafford**. Thank you.

Mr. Behnke, a recent article in Forbes magazine indicated that although there may be some problems with NRC, major problems with nuclear industry can be attributed to mismanagement by utilities, and design and construction firms.

To what extent do you believe that the problems of the nuclear industry are caused primarily by industry mismanagement, rather than problems with the NRC?

Mr. **Behnke**. Senator, with respect to the problems that Forbes magazine was referring to; namely, the extremely high cost of nuclear power today and the uncertainty, I think that it is fair to say that there is plenty of blame to go around, both on the regulatory side as well as the industry side.

What we have donein the regulatory process, particularly in the last 10 to 15 years, is to create an environment of changing requirements which have made it extremely difficult for the utilities to manage the construction of these nuclear powerplants on any kind of an economically efficient basis.

The changes oftentimes came out faster than they could be recorded on the drawings. Three or four editions of drawings were floating through the construction project. At the same time, concrete walls were put up one day and taken down the next, pipe hangers were installed and taken down and moved.

You can see this by looking at the man-hour figures and at the labor figures of nuclear powerplants constructed today compared with those that we built 10 or 15 years ago, when we had a stability of regulatory requirements. You can see this when you look at the construction timetables and the construction costs of the nuclear powerplants being built overseas.

In France, for example, and in Japan, Taiwan, and Korea, where American technology and American standards are being applied, oftentimes construction being managed by American construction firms in Taiwan, for example, these plants are being built in half the time and in less than half the cost of building the same project in the United States. I submit to you that a lot of this doesn't have anything to do with the need for stringent safety requirements or the best technology, but it has to do with the instability, the changes and the uncertainty, and the enormous amount of time that is consumed in this regulatory process.

This has to do with the fact that after the plant is all built, and supposedly built to the specifications that have been approved by the NRC, still they are licensing proceedings going on that take months while the plant sits there with interest accruing to the capital cost of the plants, and consumers waiting for power, and unable to have it because of the complexity of today's regulatory process.

This is the sort of thing that ought to be changed. These are the sort of things which the legislation you e discussing here today, in particular the standardization bill and Senator Simpson's proposal, those are things that would be addressed by those bills.

Senator STAFFORD. Let me ask you a sort of philosophical final question. Democracy and representative governments are neither the most efficient or the most predictable forms of government, yet we choose to live in a democratic society because we value ideals such as public participation in decisionmaking, and openness in decisionmaking rather than the simple efficiency or predictability.

As long as there are widespread differences of opinion in the country regarding the necessity and safety of nuclear power, will it be possible for the nuclear industry to obtain the stability and predictability it needs without sacrificing various elements of the democratic process?

Mr. BEHNKE. Senator, I am a great subscriber of the democratic process. It seems to me that it would be a terrible mistake to throw this over with the guise that this would somehow produce some efficiencies in the licensing process.

But it seems to me that thoughtful people can construct and operate a management system that will allow for participation of the public, a complete openness in the licensing process, without exposing the process to needless inefficiencies and needless delays.

Public interest is served in operating with economic efficiency, as well as operating with safety. It is served with openness. We can have all of this with carefully developed and carefully managed regulatory systems.

Senator STAFFORD. One last question that occurred to me that maybe isn't appropriate for this morning, but in view of the years that I have served on the Armed Services Committee in the Congress and, therefore, know something about our nuclear powered submarines, and so on, I have often been curious as to why they are able to run several years before a refueling is necessary, when for most of the commercial industrial plants, it seems to be necessary about once a year. Is there some particular reason for that?

Mr. BEHNKE. Senator, the refueling cycles are largely a matter of design. Commercial nuclear powerplants today are tended toward 18-month refueling cycles as opposed to 12. It is mostly a matter of economics and design. These could be operated on the basis of no refueling for 3 to 5 years if we chose to do that.

In the nuclear powerplants, your maintenance schedules, your inspection schedules call for shutdowns about every 12 to 18 months, and you have to recognize that their mission is somewhat different. For example, the nuclear submarine may be at sea for a long, long time, without access to its repair facilities.

Senator STAFFORD. Thank you very much. On behalf of the committee, I thank you very much for appearing here.

At this point, the committee will stand adjourned.

[Whereupon, at 12:05 p.m., the subcommittee adjourned, to reconvene at 10 a.m., Wednesday, June 18, 1986.]

[Statements submitted for the record and the bills S. 1235, S. 2291, and S. 2471 follow:]

PREPARED TESTIMONY
SUBMITTED BY
UNITED STATES NUCLEAR REGULATORY COMMISSION
PRESENTED BY
NUNZIO J. PALLADINO, CHAIRMAN

TO THE

SUBCOMMITTEE ON NUCLEAR REGULATION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

CONCERNING
SINGLE ADMINISTRATOR AND OTHER MATTERS

SUBMITTED: JUNE 17, 1986

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE, WE ARE PLEASED TO APPEAR BEFORE YOU TODAY FOR THE PURPOSE OF DISCUSSING 3 ISSUES: (1) WHETHER THE NRC SHOULD BE RESTRUCTURED AS AN AGENCY HEADED BY A SINGLE ADMINISTRATOR (2) WHETHER AN INDEPENDENT NUCLEAR SAFETY BOARD SHOULD BE ESTABLISHED TO INVESTIGATE SIGNIFICANT EVENTS INVOLVING NUCLEAR FACILITIES OR MATERIALS AND (3) WHETHER THE NRC SHOULD HAVE AN INSPECTOR GENERAL.

WITH RESPECT TO WHETHER THE NRC SHOULD BE RESTRUCTURED AS AN AGENCY HEADED BY A SINGLE ADMINISTRATOR AS PROPOSED IN S.1235, EACH COMMISSIONER HAS GIVEN THIS MATTER CONSIDERABLE THOUGHT AND A MAJORITY OF THE COMMISSION SUPPORTS THE SINGLE ADMINISTRATOR CONCEPT.

IN RECENT YEARS THERE HAVE BEEN THREE INDEPENDENT EXAMINATIONS OF THE STRUCTURE OF THE COMMISSION. FOLLOWING THE THREE MILE ISLAND ACCIDENT, BOTH THE KEMENY COMMISSION AND THE ROGOVIN SPECIAL INQUIRY GROUP RECOMMENDED THAT THE NRC BE HEADED BY A SINGLE ADMINISTRATOR. IN A STRONGLY WORDED STATEMENT, THE KEMENY COMMISSION DECLARED THAT "AS PRESENTLY CONSTITUTED, THE NRC DOES NOT POSSESS THE ORGANIZATIONAL AND MANAGEMENT CAPABILITIES NECESSARY FOR THE EFFECTIVE PURSUIT OF SAFETY GOALS." THE ROGOVIN INQUIRY GROUP CONCLUDED THAT "THE CENTRAL AND OVERWHELMING NEED IS FOR LEGISLATIVE AND EXECUTIVE REORGANIZATION TO ESTABLISH A SINGLE CHIEF EXECUTIVE WITH THE CLEAR AUTHORITY TO SUPERVISE AND DIRECT THE ENTIRE NRC STAFF." MORE RECENTLY THE GRACE COMMISSION

RECOMMENDED THAT CONGRESS ENACT LEGISLATION WHICH WOULD STRENGTHEN THE AUTHORITY OF THE CHAIRMAN AS THE CHIEF EXECUTIVE OFFICER OF THE AGENCY.

IN LARGE PART THE CENTRAL FOCUS OF THE DEBATE ON THE STRUCTURE OF THE NRC IS WHETHER THE PUBLIC IS BETTER SERVED BY AN ORGANIZATION WHERE IMPORTANT DECISIONS ARE MADE THROUGH A COLLEGIAL PROCESS OR BY A MORE EFFICIENTLY MANAGED AGENCY HEADED BY A SINGLE DECISION-MAKER. IN ADDRESSING THIS ISSUE THE ROGOVIN INQUIRY GROUP STATED "THERE IS NOT AN AGENCY IN GOVERNMENT THAT WOULD NOT BETTER PROVIDE FOR A DIVERSITY OF VIEWS IF IT WERE HEADED BY A COMMISSION. IT IS NOT LIKELY, HOWEVER, THAT ANY OF THESE AGENCIES WOULD BE AS WELL MANAGED."

IN 1954 WHEN CONGRESS AMENDED THE ATOMIC ENERGY ACT, ONE OF THE PRIMARY MANDATES OF THE ATOMIC ENERGY COMMISSION WAS TO REGULATE THE DEVELOPMENT OF THE COMMERCIAL USES OF NUCLEAR POWER WHICH WERE THEN IN THEIR INFANCY. IN THE ENSUING 32 YEARS MUCH HAS CHANGED. ONE HUNDRED COMMERCIAL NUCLEAR POWER PLANTS HAVE BEEN LICENSED TO OPERATE, AND THE COMMISSION'S PRIMARY FOCUS NOW IS ON ENSURING THE SAFE OPERATION OF THOSE OPERATING PLANTS. IN CARRYING OUT THIS ROLE, IT IS THE COMMISSION'S VIEW THAT EFFICIENT MANAGEMENT IS INCREASINGLY IMPORTANT.

COLLEGIAL DECISIONMAKING AND EFFICIENT MANAGEMENT ARE NOT WELL SUITED FOR EACH OTHER. FOR EXAMPLE, PROMPT DECISION-MAKING IS

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DIFFICULT BECAUSE TIME MUST BE AFFORDED FOR EACH COMMISSIONER TO CONSIDER THE ISSUES AND PROVIDE SEPARATE VIEWS. AS A RESULT, THERE IS FREQUENTLY DELAY IN RESPONDING TO REQUESTS FROM CONGRESS, IN ISSUING ADJUDICATORY DECISIONS, MAKING RULEMAKING DECISIONS, AND PROVIDING POLICY DIRECTION TO THE NRC STAFF. DEBATE OF ISSUES IS OFTEN UNDULY PROLONGED IN AN ATTEMPT TO DEVELOP A CONSENSUS POSITION, AND BECAUSE OF THE DIVERSE COMMISSIONER VIEWS, THE NRC STAFF AND THE PUBLIC SOMETIMES RECEIVE CONFUSED SIGNALS.

MOREOVER, THE GOVERNMENT IN THE SUNSHINE ACT HAS GREATLY DIMINISHED THE EXCHANGE OF DIVERSE VIEWS WHICH IS THE PRIMARY BENEFIT OF A COMMISSION STRUCTURE. THE COMMISSION CANNOT USUALLY MEET AS A BODY EXCEPT IN PUBLIC MEETINGS. THIS REQUIREMENT THAT COMMISSION DELIBERATIONS BE HELD IN SCHEDULED PUBLIC MEETINGS GREATLY DIMINISHES THE OPPORTUNITY FOR AND QUALITY OF SUCH EXCHANGE OF VIEWS. THE ADMINISTRATIVE CONFERENCE RECENTLY LOOKED AT THIS ISSUE AND REACHED THE SAME CONCLUSION. IN A 1984 REPORT TO THE CONGRESS, IT CONCLUDED THAT AN UNDESIRABLE EFFECT OF THE SUNSHINE ACT HAD BEEN A DIMINUTION OF COLLEGIALITY IN MULTI-MEMBER AGENCIES.

IN THE EVENT THAT CONGRESS DOES NOT ENACT LEGISLATION TO CREATE A SINGLE ADMINISTRATOR, THEN THE COMMISSION WOULD ENCOURAGE A CONGRESSIONAL REVIEW OF THE SUNSHINE ACT TO ELIMINATE OR REDUCE THE PROBLEMS IT CREATES FOR COLLEGIAL DECISION MAKING.

WITH RESPECT TO THE SECOND ISSUE IN THE COMMITTEE'S LETTER OF INVITATION, THE COMMISSION OPPOSES S. 2291 WHICH WOULD ESTABLISH AN INDEPENDENT NUCLEAR SAFETY BOARD. IN 1984 CONGRESS DIRECTED THE NRC TO CONDUCT A STUDY OF THE NEED FOR AND FEASIBILITY OF AN INDEPENDENT ORGANIZATION RESPONSIBLE FOR CONDUCTING INVESTIGATIONS OF SIGNIFICANT SAFETY EVENTS AT NRC-LICENSED FACILITIES. IN RESPONSE, THE NRC CONTRACTED WITH BROOKHAVEN NATIONAL LABORATORY. BROOKHAVEN SUBMITTED ITS FINAL REPORT TO THE NRC IN FEBRUARY OF 1985.

BROOKHAVEN RECOMMENDED THE ESTABLISHMENT OF A STATUTORY OFFICE OF NUCLEAR SAFETY, HEADED BY A DIRECTOR REPORTING TO THE COMMISSIONERS. HOWEVER, THE STUDY STATED CURRENT PRACTICES FOR INVESTIGATIONS OF OPERATING EVENTS HAVE BEEN CONDUCTED IN A "PROFICIENT AND TECHNICALLY COMPETENT" MANNER. WHILE BROOKHAVEN SUGGESTED A NUMBER OF IMPROVEMENTS FOR EVENT INVESTIGATIONS, IT ALSO NOTED THAT, FOR THE MOST PART, THESE IMPROVEMENTS COULD BE IMPLEMENTED WITHIN THE PRESENT ORGANIZATION STRUCTURE. MANY OF THE IMPROVEMENTS RECOMMENDED BY BROOKHAVEN HAVE BEEN ADOPTED AS PART OF THE NEWLY ESTABLISHED AND SUCCESSFUL NRC INCIDENT INVESTIGATION PROGRAM.

BASED ON THE COMMISSION'S REVIEW OF THE BROOKHAVEN REPORT AND OTHER STUDIES OF THE ISSUE, THE COMMISSION BELIEVES THAT THERE ARE NO MAJOR DEFICIENCIES IN THE NRC ACCIDENT INVESTIGATION PROGRAM

THAT WOULD WARRANT FORMATION OF AN INDEPENDENT NUCLEAR SAFETY BOARD.

RATHER THAN TO CORRECT AN EXISTING DEFICIENCY, THE JUSTIFICATION FOR A NUCLEAR SAFETY BOARD APPEARS TO REST ALMOST ENTIRELY UPON A PERCEIVED NEED TO ELIMINATE ANY POTENTIAL CONFLICT OF INTEREST IN ORDER TO GAIN INCREASED PUBLIC, MEDIA, AND CONGRESSIONAL CONFIDENCE IN THE INVESTIGATORY PROCESS. IT IS ARGUED THAT A NUCLEAR SAFETY BOARD WOULD INCREASE CONFIDENCE IN THE INVESTIGATORY PROCESS BY RELIEVING THE NRC OF THE RESPONSIBILITY TO INVESTIGATE AND DETERMINE THE CAUSE OF AN EVENT TO WHICH THE NRC'S OWN REGULATORY ACTIVITIES MIGHT HAVE BEEN CONTRIBUTING FACTORS.

UNDER S. 2291, THE NUCLEAR SAFETY BOARD COULD DIRECT THE NRC TO PERFORM THE DESIRED INVESTIGATIONS AND THEN REVIEW THE RESULTS. THIS WOULD NOT CREATE THE PERCEPTION OF AN "INDEPENDENT INVESTIGATION." ON THE OTHER HAND, IF THE NUCLEAR SAFETY BOARD WOULD CONDUCT ITS OWN INVESTIGATIONS, THEN THE RESOURCES CONTEMPLATED FOR THE BOARD WOULD NEED TO BE SUBSTANTIALLY AUGMENTED.

IT APPEARS THAT ITS WORKLOAD COULD BE COMPARABLE TO THAT OF THE NATIONAL TRANSPORTATION SAFETY BOARD. THAT BOARD CURRENTLY HAS APPROXIMATELY 320 EMPLOYEES AND ITS BUDGET IS IN EXCESS OF 22 MILLION DOLLARS PER YEAR. WHILE WE ARE NOT SUGGESTING THAT THE

BOARD BE GIVEN A STAFF OF 320, THE DESIRED INVESTIGATIVE RESULTS WOULD NOT BE OBTAINED BY TRANSFERRING THE 40-45 FULL-TIME EMPLOYEES CURRENTLY ASSIGNED TO NRC'S OFFICE FOR ANALYSIS AND EVALUATION OF OPERATIONAL DATA TO THE NUCLEAR SAFETY BOARD. EITHER THE RESOURCES ALLOCATED MUST BE SUBSTANTIALLY INCREASED OR THE EXPECTATIONS ABOUT THE RESULTS MUST BE SUBSTANTIALLY REDUCED.

A NUCLEAR SAFETY BOARD WOULD ALSO LIKELY LEAD TO A DUPLICATION OF EXISTING COMMISSION FUNCTIONS. FURTHER, THE BOARD'S ACTIVITIES MIGHT HINDER THE COMMISSION FROM ACTING EFFECTIVELY IN THE EVENT OF AN INCIDENT. AND, IN ANY EVENT, THE BOARD COULD WELL BE PREEMPTED BY A PRESIDENTIAL COMMISSION IF THERE WERE A SIGNIFICANT ACCIDENT IN THE FUTURE.

REGARDING THE THIRD ISSUE, THE COMMISSION ALSO OPPOSES S. 2471 WHICH WOULD ESTABLISH AN INSPECTOR GENERAL WITHIN THE NRC. THE COMMISSION'S AUDIT AND INVESTIGATIVE UNIT FOR INTERNAL AFFAIRS--THE OFFICE OF INSPECTOR AND AUDITOR (OIA)--HAS DIRECT ACCESS TO THE COMMISSIONERS, AND HAS ALL THE NECESSARY INDEPENDENCE TO DO ITS JOB. MOREOVER, SINCE THE AGENCY IS RELATIVELY SMALL, THE COMMISSION BELIEVES IT IS IMPORTANT THAT OIA REMAIN A NECESSARY MANAGEMENT EXTENSION OF THE COMMISSION IN OVERSEEING THE PROGRAMS AND ACTIVITIES OF THE NRC. ESTABLISHMENT OF AN INDEPENDENT INSPECTOR GENERAL WOULD TAKE SOME OF THOSE MANAGEMENT BENEFITS AWAY FROM THE COMMISSION. IN THE ABSENCE OF ANY SHOWING THAT STATUTORY INDEPENDENCE IS NEEDED FOR OIA, THE

Commission opposes establishment of an office which would lessen its ability to direct the functioning of the Agency and which would impose new, burdensome, and probably costly, requirements on the Commission.

Furthermore, by including under the Inspector General, the activities of NRC's Office of Inspector and Auditor as well as NRC's Office of Investigation, this bill will diffuse the attention of the Inspector General by directing its operations to both internal and external problems. Also, by some of its provisions, the Inspector General function would overlap and complicate some of the Commission functions with respect to investigating licensee actions and safety issues. The overlap of responsibilities would be even more complex if both the proposed IG bill and the proposed Nuclear Safety bill were to be enacted.

Finally, the Committee has requested the Commission's recommendations on whether other legislative initiatives could improve the regulatory process. We commend several other legislative proposals to you. The Commission believes that the time is long overdue for licensing reform legislation. The NRC has submitted a legislative proposal to Congress (S. 836) and we urge prompt Congressional action on that important subject. Extension of the Price-Anderson Act is also essential. We also urge Congress to enact S.274, legislation which would enhance physical security at power reactor sites by authorizing our licensees to have access to

FBI CRIMINAL HISTORY RECORDS. THAT INFORMATION WOULD BE USED BY LICENSEES AS PART OF THE SCREENING PROCESS TO DETERMINE WHICH EMPLOYEES SHOULD BE GRANTED UNESCORTED ACCESS TO VITAL AREAS OF THE REACTOR SITE. S.274 HAS BEEN PASSED BY THE SENATE AND IS CURRENTLY PENDING IN THE HOUSE OF REPRESENTATIVES.

THIS CONCLUDES THE COMMISSION'S PREPARED STATEMENT, MR. CHAIRMAN. WE APPRECIATE THE OPPORTUNITY TO DISCUSS THESE IMPORTANT MATTERS WITH THE COMMITTEE THIS MORNING AND WILL BE GLAD TO RESPOND TO ANY QUESTIONS YOU MAY HAVE.

STATEMENT BY COMMISSIONER JAMES K. ASSELSTINE

BEFORE THE

SUBCOMMITTEE ON ENERGY AND THE ENVIRONMENT
HOUSE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS

July 22, 1986

Mr. Chairman, I take a somewhat different view of the four issues being considered by the Subcommittee than does the Commission majority.

Licensing Reform

On the subject of licensing reform, although I support legislation to bring about the greater use of standardization in nuclear power plant design and to correct the quality assurance, construction and management problems which have occurred in recent years, I cannot support either the Commission's legislative proposal (H.R. 1447) or the proposal submitted by the Department of Energy (H.R. 2488) in their present form. In my view, these proposals do not go far enough in requiring the development of complete standardized designs, and they contain seriously flawed provisions which would undermine current safety standards and unreasonably restrict the public's right to participate in licensing proceedings.

The Commission's testimony cites as one of the primary shortcomings of the present licensing system a lack of predictability and stability. I agree. However, I do not agree with all of the reasons given by the Commission for this lack of predictability and stability. In my view, the failures of the past can be attributed to five principal factors. First, the design of the plants has been far from complete at the time that NRC authorized the start of construction. As a consequence, it has been difficult, if not impossible, for the NRC to determine whether the proposed plant meets all regulatory requirements. This means that difficult design questions are deferred to be resolved during the construction period, and there is, thus, the potential for hearings on unresolved plant design issues after the plant has been substantially completed. Perhaps most important, the licensee must design the plant as it is being built, an approach that enormously complicates the construction process.

Second, both the NRC and the nuclear industry have made optimistic assumptions about the adequacy of the plant designs and the expected performance of the plants. Actual operating experience has demonstrated that many of these optimistic assumptions are unsupportable. This has led to changing requirements and the need for safety improvements in the plants. For example, assumptions that key safety components in the plant, such as the primary coolant piping system, the steam generators, and electrical cable, would retain their integrity for the full 40-year operating life of the plant have proven to be unfounded, and licensees are experiencing severe degradation of some of these components within the first ten years or less of plant operation.

Third, a number of difficult safety issues were deferred not only until the construction period, but also beyond the start of plant operation because requiring a resolution of the issues would have delayed licensing. As a result, there is a backlog of generic and unresolved issues that must be addressed to provide adequate assurance of safety for the remaining operating lives of the existing plants.

Fourth, some utilities have failed to meet their licensing commitments and NRC regulations. This is particularly evident in the plants that have experienced construction quality assurance breakdowns in recent years. Where the licensee cannot demonstrate that the plant has been built in conformity with its license and NRC regulations the result is a costly and time-consuming corrective program to verify the safety of the as-built plant.

Finally, the NRC has failed to pay sufficient attention to factors that can significantly influence whether the utility meets its license commitments and NRC regulations. Perhaps the most important of these factors is the experience and competence of the licensee's construction management team. Despite what the industry characterizes as an overly detailed and prescriptive set of regulatory requirements, the NRC has not set standards for licensee management and has not insisted that the utility applicant have in place an experienced and competent management team before authorizing the start of plant construction. Nor has the NRC always been effective in identifying quality assurance breakdowns early in the construction process. Although the two-step licensing process may have been a contributing factor in these past failures, the principal fault lies with the Commission's reactive approach to safety regulation. Unfortunately, neither H.R. 1447 nor H.R. 2488 include provisions to address these weaknesses in the

Commission's approach to safety. My concerns about the Commission and DOE legislative proposals are described in greater detail below.

Under the Commission's 1983 legislative proposal, which I supported, the provision allowing for the issuance of a combined construction permit and operating license (CP/OL) required the application to contain "sufficient information to support the issuance of both a construction permit and an operating license" in accordance with NRC regulations. The Commission's current legislative proposal has weakened this to require submission merely of "sufficient information to support issuance of a combined construction permit and operating license." The Commission has not explained why a combined CP/OL should require less information than the separately issued CP and OL.

The difficulties presented by this lowered standard are aggravated by the Commission's decision to delete the requirement in our previous bill for a preoperational review of the adequacy of a plant's construction, its readiness for operation, and the sufficiency of the emergency planning measures. The Commission has also declined to commit itself to preoperational reviews of significant safety issues not previously considered. The Commission argues that the inspections, tests, analyses, and acceptance criteria specified in the combined CP/OL will assure the proper construction of the plant and its readiness for operation. This ignores our unfortunate experiences in recent years with the unforseen safety problems and with construction projects which have run into difficulties and have, in some cases, been cancelled.

The Commission would have done better to stick with its 1983 proposal which required it to make a formal finding that construction had been completed and that the plant would operate in conformity with the combined CP/OL, the Atomic Energy Act and the NRC's regulations. It is worth noting that in 1983 the Commission recommended that it be required to conduct a supplemental review, prior to the commencement of operation, of any issues that were not considered in prior reviews of the facility. I see no basis to support the Commission's change in position on this important safety requirement. The DOE bill also suffers from this failure to require preoperational reviews of key safety issues by the NRC.

The Commission's 1985 bill would place a very high threshold on the ability of a member of the public to obtain a hearing after the issuance of the combined CP/OL. In order to designate an issue for a hearing the Commission would have to find that (a) the issue consists of a substantial dispute of fact, (b) resolution of the issue is necessary for the Commission's decision, (c) the issue cannot be resolved with sufficient accuracy except at a hearing, and (d) either (i) the issue was not and could not have been raised and resolved in any prior proceeding for that facility, or (ii) that (1) there has been a nonconformance with the license, (2) such nonconformance has not been corrected, and (3) such nonconformance could materially and adversely affect the safe operation of the plant. The DOE bill imposes a similarly high threshold for public hearings and would expressly allow plant startup prior to the completion of hearings on significant safety issues. As a practical matter, this thicket of obstacles will make it impossible for people living close to a plant to obtain a hearing on the issues such as emergency planning, adequacy of plant construction and readiness for operation, which are of greatest concern to them. I am opposed to these new obstacles to state and public participation in our licensing proceedings. I believe that the smooth operation of the licensing system does not require the public's hearing rights to be artificially restricted. Indeed, I am persuaded that these efforts to limit public involvement will only stimulate opposition to future nuclear power plants.

In addition, I would point out that the combined CP/OL, early site review, and standardized design provisions of the bills contain a statutory limitation on backfitting. Putting aside my reservations about the wisdom of the Commission's proposed backfitting standard (conditioning a backfit on a showing that it will substantially advance public health and safety by improving overall plant safety), I recommend that the Congress not enact these provisions. As the Commission itself noted when it submitted its 1983 proposal, this is a problem which can be better addressed in the Commission's regulations. The Commission has had relatively little experience with formal backfitting standards. If this formulation turns out to be unworkable and detrimental to safety, the regulations could be modified relatively easily. A statute would be far more difficult to amend. Indeed, the Commission's recent experience with its new backfit rule is already disclosing some serious difficulties with the rule. For example, the backfit rule as presently formulated may make it impossible for the NRC to require improvements in the aoility of U.S. plants to survive a loss of AC power for emergency systems (station blackout) despite the fact that the

NRC staff and other countries view this as one of the most important unresolved safety issues. Similarly, the Commission may well be foreclosed by the backfit rule from bringing its radiological protection regulations into conformity with current technical knowledge and accepted international standards and from adopting any new requirements in the important areas of human performance. The DOE bill would freeze by statute these questionable provisions of the Commission's current backfit rule.

For the foregoing reasons, the Commission and DOE proposals should be redrafted (1) to ensure that plants with combined CP/OL's meet the same safety standards as plants licensed under the present regulatory scheme, and (2) to afford interested states and members of the public an opportunity for a hearing prior to plant operation on issues such as emergency planning, adequacy of plant construction, and readiness for operation. In addition, I believe that a licensing and standardization bill should include other provisions not found in the Commission and DOE proposals to bring about the greater use of improved standardized designs and to address some of the construction and quality assurance problems which have been identified in recent years. To that end, I would recommend adding provisions to the bill to require that future nuclear power plant applications use essentially complete standardized plant designs which incorporate as key design elements greater simplicity, larger margins of safety, and other characteristics that promote more efficient construction, operation, maintenance and reliability. Further, the bill should require that any future design or plant application satisfactorily resolve all existing safety questions, including the unresolved and generic issues prior to the issuance of a design approval or authorization of construction. I would also recommend requiring that future plant applications use a centralized management approach for the construction project with specified check points to assure adequate quality as construction proceeds. Finally, I would require that the NRC develop standards for utility management and that the utility applicant demonstrate that it has an experienced and competent management team in place before the NRC approves the start of construction. Such provisions would do much, in my view, to correct the mistakes of the past.

Single Administrator, Safety Board, Inspector General

The majority favors the establishment of a single administrator, but with no independent safety review group and with no Inspector General. That would be a very different decisionmaking process than we have today. Decisions on major policy issues would be made in private without the benefit of the exchange of differing viewpoints and with reduced public involvement or observation. There would be no independent group to serve as a check on the industry's and the agency's safety performance, to review operating experience at the plants and to investigate accidents and serious operating events at our licensed facilities. There would be no independent source of advice to the Congress on the current state of nuclear safety and the adequacy of the federal regulatory program. And, unlike virtually every other single-administrator agency in the government, there would be no independent watchdog to police internal agency misconduct. Finally, as I have discussed previously, the majority advocates streamlining the licensing process for future nuclear powerplants by substituting a discretionary hearing for the present right to a hearing by interested members of the public prior to plant operation. This change would allow the Commission broad discretion to reject hearing requests prior to plant operation on such issues as emergency planning, quality assurance and readiness for operation. Given the Commission's past reluctance to grant discretionary hearings -- only one has been granted and it ended in the Commission's rejection of all of the NRC technical staff's proposed safety improvements for the plant -- as a practical matter this probably means an end to hearings on these issues of greatest interest to the public. The upshot of all this would be a much more closed system, with less debate and public ventilation of nuclear safety issues, with less technical oversight of the agency's and the industry's performance, and with substantially reduced public involvement.

Mr. Chairman, I believe that such a system is fundamentally at odds with the plan envisioned by the Congress in 1954, when it gave the responsibility for nuclear safety regulation to a Commission. It is worth remembering that the 1954 Act struck an important bargain. The states were preempted from safety regulation of nuclear powerplants. But in return, there was to be an open federal regulatory process. The broad public policy issues associated with nuclear regulation were to be considered by a multi-member Commission, composed of individuals with different backgrounds, experience, training, and views on the issues. The views of the members of the Commission were to be available not only within the collegial decisionmaking process but also to the Congress and to the public. The public and the states were to be involved extensively throughout the process, and they were to be given a right to a hearing on each valid safety issue and to have that issue resolved by a group of independent judges separate from the NRC technical staff. If the Congress intends to restructure the NRC in a manner that will sharply reduce the benefits to the public and the states provided by the 1954 Act, as the majority now recommends, then perhaps it is also time to reconsider the other side of the balance that was struck in 1954. Specifically, it may be appropriate to restore to the states the authority to set and enforce their own safety requirements for the facilities provided that those standards meet or exceed the minimum federal standards.

Mr. Chairman, the majority offers several arguments in support of the single administrator form, and I would like to address each one briefly. First, the majority argues that a single administrator will result in more efficient management and decisionmaking than does the Commission form. I do not believe this is necessarily the case. In fact, a comparison of the performance of the NRC with the two other single-administrator agencies with nuclear responsibilities, DOE and EPA, would seem to indicate that the Commission is at least as efficient in management and decisionmaking. The Commission has been far ahead of EPA, for example, in promulgating its technical requirements for high-level radioactive waste disposal, low-level waste disposal and uranium mill tailings. Similarly, the Commission was able to carry out its responsibilities for the site selection guidelines for the high-level waste repository much faster than was DOE. On the basis of actual experience, I would argue that the Commission form is not necessarily more inefficient than the single administrator. Nor do I see, in general, significant delays in Commission decisionmaking. Where delays occur, it is invariably because the issues are complex and the choices are far from clear. Such difficult decisions take time, whether they are being considered by a single administrator or a Commission.

Second, the majority contends that the Commission form is outdated, and is ill-suited to the oversight of 100 operating nuclear powerplants. Implicit in this statement is the argument that the Commission no longer faces the types of broad public policy issues that benefit from full and open discussion by a multi-member group with differing viewpoints. I do not believe this is the case. In recent years, the Commission has considered or is in the process of considering a broad range of safety issues, including:

- the adequacy of safety at the Indian Point plants;
- the Commission's severe accident policy;
- the Commission's requirements for backfitting new safety features on existing plants;
- the radioactive source term from a severe accident;
- safety goals for assuring the safety adequacy of current and future plants;

- the adequacy of emergency planning requirements;
- the Commission's confidence that permanent waste disposal facilities will be available when needed;
- the soundness of our enforcement policy; and
- reactor decommissioning.

Each of these is a major policy issue that is particularly well-suited to consideration by a multi-member Commission, and I expect that we will continue to be faced with such issues in the future.

Although I am sure that the NRC would benefit from greater management attention in the oversight of the 100 operating plants, I believe that this can be readily accomplished with the Commission form. For example, there is nothing to prohibit the Chairman from taking a more active and direct role in assuring that the NRC staff carries out the regulatory policies established by the Commission. I believe that Chairman Zech is taking a much more active management role of the staff as Chairman, and I strongly support that. So long as he does not attempt to alter Commission policy or make policy decisions on his own, there is nothing to prevent the Chairman from taking a more active role in the day-to-day management of the staff. Indeed, such an approach provides for improved management oversight while at the same time retaining the benefits of Commission consideration of the broad public policy issues that routinely come before this agency. I might add that no additional legislation is needed for the Chairman to carry out this management role. Taking this approach, in my view, is preferable to replacing the Commission form with a single administrator.

The remaining two reasons given by the majority in support of the single administrator are more troubling to me. The majority argues that existence of differing Commission views on the issues can confuse the staff and the public, and the majority objects to being required to hold its deliberations in public, as required by the Government in the Sunshine Act. I should note that the latter objection goes beyond previous Commission statements in favor of some limited authority to hold private discussions to exchange preliminary thoughts on issues before the Commission. I am not impressed by either of these arguments. I believe that the Congress and the public benefit from hearing different views and perspectives on the significant policy issues before the Commission. Rather than confusing the public and the staff, they assure that different viewpoints are heard and considered. As for the Sunshine Act, whatever the merits of some limited preliminary discussions in private, the actual debate on the principal safety issues facing the NRC should take place in public. Why should the states, that have been preempted from setting safety standards for nuclear reactors, also be preempted from the Federal deliberative process for setting safety standards or for assessing the public health and safety significance of operating events and accidents? To give just one example, in the aftermath of the Chernobyl accident, the public is most concerned with whether we can expect to see a core meltdown in the United States in the foreseeable future, what the chances are that such an accident could lead to large offsite releases of radiation, whether the Commission views the present level of risk to be acceptable, and if not, what we are doing to reduce it. These are the kinds of issues that the Commission should address openly and in a public forum.

Mr. Chairman, I also do not believe that a single administrator form is in the industry's best interests. The industry continually argues for the need for improved regulatory stability and predictability, given the fact that ten years or more are needed to build the plants, and the plants are expected to operate for 30-40 years or more. With a Commission, major policy changes tend to occur gradually, since turnover among individual Commissioners is staggered. With a single administrator, large changes in policy and direction can occur quite rapidly, often with drastic consequences for the regulated industry. I think the experiences of recent years with EPA and the Department of the Interior are good examples. One should consider whether this industry, with its particular need for predictability and stability, would be best served by a regulatory system that is subject to wide and rapid fluctuations.

On the subject of the Nuclear Safety Board, I believe that an independent safety board is needed to assure that we and the industry learn the crucial lessons of operating experience at the plants. Although improvements have been made in recent months in our ability to investigate serious operating events, our capability to seek out and correct the root causes of these events is still inadequate. Despite two investigations of the Davis-Besse event last year, including one involving some people from outside the NRC, we still do not have a clear understanding of the root causes of that event, including particularly the contributions of management attitudes and practices by the licensee's senior management and the role of the NRC staff in not bringing about effective corrective action early on. The same is true for the Rancho Seco event last year, which raises even more serious questions about the NRC's past performance in regulating the Babcock and Wilcox reactors. It is simply not realistic to expect that the NRC will be able to evaluate in a critical and objective manner its own past performance. A Nuclear Safety Board would provide the necessary independence and objectivity. To avoid the proliferation of advisory groups, I would abolish the Advisory Committee on Reactor Safeguards. In view of the decline in the Commission's licensing caseload and the increasing importance of operating experience at the plants, I believe the Commission, the Congress and the public would be better served by adding a Nuclear Safety Board and by eliminating the ACRS.

Finally, Mr. Chairman, I believe that a statutory Inspector General to police internal agency misconduct would be a benefit. It would provide much-needed credibility to our internal process for identifying and dealing with employee misconduct, and might improve our somewhat strained relationship with the Department of Justice. I also see no need for direct Commission control of the functions of such an internal investigative office. Indeed, the Inspector General system seems to work quite well in the many agencies now subject to this system. Although I support a statutory Inspector General for the NRC, I believe that it, like the Nuclear Safety Board, becomes essential if the Congress decides to replace the Commission with a single administrator. Thank you.

TESTIMONY OF
COMMISSIONER FREDERICK M. BERNTHAL
U.S. NUCLEAR REGULATORY COMMISSION

before the

SUBCOMMITTEE ON NUCLEAR REGULATION
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

June 17, 1986

Mr. Chairman, I find myself in general agreement with the comments of Chairman Palladino. But it is essential, in my judgment, to realize what is at stake here, and how we at the Commission have come to this pass of near unanimous recommendation that our jobs be abolished.

I do not believe there are flaws inherent in the Commission form of governance, as originally conceived, for regulating a subject as controversial as nuclear power. The need for continuity and stability in the nuclear regulatory process seems to beg for a commission. But the perverse system we now have goes far beyond stability -- it is tying us in knots. It leads not to consensus, but to fragmented and ultimately flawed decisions.

As if the constraints of a strict adjudicatory process, with all the rules of "on the record", "separation of functions", and "ex parte" weren't complicating enough, the Sunshine Act requires that where three or more Commissioners are gathered together, no conversation of substance may be held unless the public is also present.

In other words, we can't talk to our staff, we can't talk to you, and we can't talk to each other. More and more, Commissioners may well be found talking to themselves.

The point of collegiality is to arrive at a balanced and reasoned decision, in the hope that five heads of diverse experience and knowledge are better than one. However, the Sunshine Act has so distorted and crippled the Commission concept of governance that I have reluctantly concluded that, absent significant change in the law, a single administrator is the only practical solution.

But I wish to emphasize that, in my judgment, the public interest would at best only lose less in that circumstance. It would be far better to permit the commission system to function as it was originally intended than to be forced to resort to a single administrator so that the Sunshine Act is rendered irrelevant to final decision-making.

The Commission is a vehicle for stability and protection of the public need to know various and dissenting points of view in this matter of the safe use of nuclear energy. For a subject so contended as is nuclear power today, I believe the public will be the poorer not to have the benefit of such diverse opinion. If collegial decision-making is desirable in principle but impossible in practice because of misguided if well-intentioned law, the solution is not to dispose of collegial decision-making.

It must be noted that it is not the more politically responsive single-administrator executive agencies which have been penalized into ineffectiveness and inefficiency; it is we commissions -- we with the inherent checks and balances and safeguards of the public interest.

The strictures of the Sunshine Act have slowly spelled the demise of the free and frank exchange of ideas which is the foundation and purpose of collegial decisionmaking. Anyone who believes that such candid exchanges occur regularly in the Commission's open meetings is deluding himself. Nor is there any longer such a thing as a closed Commission meeting on sensitive subjects lawfully closable under the Sunshine Act. Thus is the estimable concept of collegial decisionmaking rendered an illusion -- degraded in practice to what often amounts to decisionmaking by exhaustion.

Some argue that the fault lies in the unwillingness of this Commission (as though it is really any different from all the others) to discuss publicly all matters with unalloyed frankness and candor. That is like saying, as has sometimes been said, that Marxism would be a perfect system but for the deficiencies of human beings.

Last year the Commission amended its regulations interpreting the Sunshine Act to comport more with common sense and with the intent of the Act. We decided to adopt the interpretation of the law embraced by the Congress itself when it enacted the legislation, by the Supreme Court, by the Administrative Conference, and by virtually every other government agency in Washington.

The consequences of the Commission's sensible and well-intentioned action are well known. The Commission's decision was often deliberately distorted, portrayed in the news media and elsewhere as an attempt to create a wall of secrecy around the Commission, when the real objective was simply to rescue what was left of the concept of collegial discussion.

My conviction has since grown that this misbegotten statute, the Sunshine Act, would eventually preside over the general demise of the commission form of governance, a form which I remain convinced has its place in our system of regulation. It will be interesting to see how much sun shines on the private deliberations of a single administrator head of the Nuclear Regulatory Commission.

But the Sunshine Act and our cumbersome administrative procedures are not alone in contributing to an inefficient and sometimes ineffectual NRC. I have long believed that Congress' decision to abolish the Joint Committee on Atomic Energy to oversee all aspects of the development and use of this still new technology was a fateful mistake.

While Congress now rightly concerns itself with the accountability of commissions, Congress a decade ago began to speak with a multitude of dissonant voices in carrying out its responsibilities for oversight of the NRC. If the disparate opinions of five Commissioners often seem confusing to the Congress, the directives of half a dozen and more committees of oversight jurisdiction seem equally confusing to the Commission.

Should the Congress now choose to adopt the single administrator approach for the NRC, as I believe on balance it should, careful thought must be given to the details of its implementation. For just as a competent, objective, dedicated single administrator can more efficiently and productively manage nuclear regulation, a less capable or less well motivated individual could in short order do irreversible damage to the still fragile viability of the nuclear option in this nation.

This brings me to S.2291, which embodies principles of considerable merit. More than a year ago, I urged the Commission to consider forming a separate, Commission-level group to investigate events such as that at Davis-Besse. Instead, the Commission has adopted a piecemeal, ad-hoc approach, and has constituted separate groups to explore causes and remedies for the Davis-Besse, Rancho-Seco, San Onofre-1, and Gore, Oklahoma incidents.

While the performance of those investigative teams has thus far been laudable with respect to technical evaluation, the question of credibility in NRC Staff self-evaluation remains. It is unrealistic to expect that there will not be at least a few significant incidents per year at NRC-licensed facilities, and it is increasingly apparent that the Commission needs some permanent entity to deal with events where the procedures of NRC itself might be in question.

Having been clearly and repeatedly counseled by the Brookhaven study, by the ACRS, and most recently by the Chairman of the Davis Besse Ad Hoc Review Group (not to mention by events themselves), I am at a loss to explain the resistance to such a logical administrative step. Failure to do so simply invites Congress to do what I do not believe is necessary or wise outside the context of a single administrator agency.

I would therefore support the legislation proposed in S.2291 to establish an independent Nuclear Safety Board only in the event that the NRC becomes a single administrator agency. The Rogovin and Kemeny Commissions both recommended such a Safety Board within this context. Should Congress fail to establish a single administrator NRC, I would continue to oppose the Safety Board concept because we already have an independent nuclear safety board -- it's called the Nuclear Regulatory Commission.

Finally, I proffer a suggestion that I believe could greatly simplify the generally agreed and desirable objective to establish a single-administrator NRC.

Within two years, all but a few nuclear powerplants in this country will have completed their construction phase, and should have been licensed for operation by the Commission. Therefore, between now and 1990, this agency will make a transition from an agency preoccupied with engineering and construction to an agency monitoring nuclear powerplant operations and the safe use and disposal of radioactive materials -- a mode which could well continue through the remainder of this century.

Given this circumstance, it would seem to me that the Congress should seriously consider as an alternative to the proposed single-administrator NRC the advantages of combining the NRC and the Environmental Protection Agency under a single agency head. Several European countries have a similar arrangement, so the idea is hardly novel. Indeed, the establishment of an independent NRC was, in some respects, from the beginning an accident of legislative history. Had the EPA not been constituted before the breakup of the Atomic Energy Commission, matters might well have turned out differently.

A number of useful purposes might be served by taking such an action at this juncture, not the least of which would be considerable budgetary savings, and a straightforward path to single administrator.

Moreover, relieved of its special responsibility to oversee a historically great multitude of engineering and construction projects, the NRC would share a common objective with the EPA -- protection of the public health, safety, and the environment. Instead of the NRC and EPA finding themselves beset by a host of overlapping jurisdictional entanglements, as we do at present, I believe the combined expertise and institutional experience of these two agencies would prove to be wholly complementary and indeed, synergistic.

The risks associated with acid rain, chemical wastes, air pollution, and the panoply of environmental insults generated by the activities of man should, along with the risks of nuclear power generation, in the long run be treated on a common footing. A combined EPA and NRC could, based on a balanced and objective view of risk and public acceptance, develop broad regulatory and environmental policy to encompass our respective areas of responsibility, for the greater public good.

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U.S. NUCLEAR REGULATORY COMMISSION

RESPONSES TO QUESTIONS

ON

SINGLE ADMINISTRATOR
HEARING OF JUNE 17, 1986

SUBMITTED TO THE

SUBCOMMITTEE ON NUCLEAR REGULATION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

AUGUST 1986

QUESTION 1. How many of you are satisfied with the way that the Commission currently functions in making decisions and implementing policy, and how many of you believe that the American public is getting what it deserves from the regulatory process for commercial nuclear power plants?

ANSWER.

The Commission operates reasonably well considering that adjudicatory, rulemaking and policy decisions must be made within a collegial framework and the constraints imposed by the Government in the Sunshine Act. As discussed in greater detail in our responses to question 2, the majority of the Commission believes that the agency would be better managed if it were headed by a single administrator.

The Commission is continually trying to improve its regulatory process. For example, we recently enacted new regulations regarding backfitting and are in the process of amending our ex parte and separation of functions rules. Our process would be further improved if the Congress enacted licensing reform legislation which encouraged standardization of facilities and authorized one-step licensing.

Commissioner Asselstine adds:

Commissioner Asselstine believes that broad public policy issues associated with nuclear regulation should be considered by a multi-member commission, composed of individuals with different backgrounds, experience, training, and views on the issues. A commission form can work if the members of the commission want it to work. He supports the Chairman in taking a more active role in the day-to-day management of the staff in carrying out the policy decisions of the Commission.

QUESTION 2. How many of you support the single administrator proposal, and for what reasons?

ANSWER.

Chairman Zech, and Commissioners Roberts and Bernthal support the single administrator proposal. Commissioner Asselstine prefers retention of the collegial commission for the reasons stated in his prepared testimony.

The majority supports the single administrator proposal for several reasons. The primary reason is that collegial decision-making and efficient management are not well suited for each other. There is frequently delay in responding to requests from Congress, in issuing adjudicatory decisions, making rulemaking decisions, and providing policy direction to the NRC staff. Debate of issues is often unduly prolonged in an attempt to develop a consensus position, and because of the diverse Commissioner views, the NRC staff and the public sometimes receive confused signals. No one person is fully accountable for the management of the agency. The Commission's primary focus now is on ensuring the safe operation of the 100 power reactors that have been licensed to operate. In carrying out this role, it is the Commission's view that efficient management is increasingly important and that a substantial increase in efficiency can only be achieved through enactment of single administrator legislation.

Moreover, the Government in the Sunshine Act has greatly diminished the exchange of diverse views which is the primary benefit of a Commission structure. The Commission cannot usually meet as a body except in public meetings. This requirement that Commission deliberations be held in scheduled public meetings greatly diminishes the opportunity and quality of the candid exchange of collegial views. The Administrative Conference recently looked at this issue and reached the same conclusion. In a 1984 report to the Congress, it concluded that an undesirable effect of the Sunshine Act has been a diminution of collegiality in multi-member agencies.

QUESTION 3. To what extent do you view "collegial interaction" as a benefit of the Commission structure, and how much "collegial" formulation of policy --with all five Commissioners present--actually takes place at the Commission?

ANSWER.

The Commission meets as a collegial body each week, sometimes several times each week, to discuss adjudicatory, rulemaking, and policy issues. During these meetings consensus positions are sometimes shaped. In addition to this interaction at Commission meetings, the Commissioners communicate views to one another in writing on a multitude of matters, and sometimes two Commissioners meet to discuss issues. The benefits of collegial decision-making , in any event, are not being achieved because of the restrictions imposed by the Government in the Sunshine Act.

Commissioner Asselstine adds:

Commissioner Asselstine believes that when it occurs, "collegial interaction" can be of great benefit, as exemplified in the Commission's most recent meeting on the Safety Goals Policy Statement. He believes that this experience shows that "collegial interaction" can occur at the NRC.

QUESTION 4. As I look down the list of actions taken by the Commission over the years, it strikes me that surprisingly high number of actions are taken either by "notation vote" or through a process that you call the "Commission Tracking System". And in many cases, it appears that major policy decisions are never discussed in the "collegial context. When you prepared your report to Congress on the Price-Anderson Act, for example -- a major policy issue-- the Commission never met to discuss the issue. In light of this and other examples, I wonder whether anyone truly believes that "collegiality" actually benefits the decision-making process? Would you please comment?

ANSWER.

See our response to Question 3.

QUESTION 5. Please comment on whether you think that the diversity of views that are brought to bear on any given issue at the Commission, as a result of having five Commissioners, is any greater than the range of views that the Administrator of EPA or the FAA has, when he makes a decision, as a result of the interaction of those administrators with their staffs and with the public? Does the Commission have a broader perspective than other health and safety agencies, simply because it has more members?

ANSWER.

The effective and frank exchange of views is often achieved in discussions among equals in a truely collegial process. But, the Commission does not believe that the presence of a collegial body is essential to ensure that a range of views are considered. The Commission also does not believe that it necessarily has a broader perspective than other agencies because it has five members. Consideration of differing views and perspectives can be facilitated with a single administrator by good staff work and, where appropriate, public comments and hearings on agency proposals.

Commissioner Asselstine adds:

Commissioner Asselstine believes the answer to both questions is yes.

QUESTION 6. Do you think that these other agencies, which are headed by a single administrator and accountable within the executive branch, carry out their statutory responsibilities to protect the public health and safety in a more or less effective manner than the Commission?

ANSWER.

The Commission does not believe that single administrator agencies necessarily carry out their responsibilities more effectively than the Commission does, but believes that those agencies have the capability of carrying out their duties more efficiently and in a more timely manner than the Commission.

Commissioner Asselstine adds:

Commissioner Asselstine believes that the effectiveness of the agency is determined more by the capabilities, competence and attitudes of the senior management of the agency than by the organizational structure. Recent events at TVA and NASA are examples of managerial failures in two agencies with very different organizational structures. As to the Commission's response, Commissioner Asselstine believes that the Commission is at least as efficient in carrying out its responsibilities as is EPA and DOE in carrying out their nuclear responsibilities.

QUESTION 7. Many have criticized the single administrator proposal because of the potential that the executive branch would interfere in the decision-making process--and presumably to the detriment of nuclear safety. As I look at agencies such as EPA, FDA, or the FAA, however, I simply do not see, in practice, the kind of adverse influence that people seem to be concerned about. What is it about nuclear matters that is any different from the health and safety functions that these other executive branch agencies carry out--and, by and large, very effectively--and do you share the concern about undue executive branch interference?

ANSWER.

Nuclear matters do not significantly differ from health and safety functions that other executive branch agencies carry out.

If the Commission were headed by a single administrator, it would presumably be required to submit its proposed Congressional testimony, answers to Congressional questions, and proposed legislative packages to OMB for clearance. It would also presumably be required to receive OMB clearance on its rulemaking proposals. Whether this creates the potential for "undue" executive branch influence depends on how one views OMB's role in a particular case. We would expect a nuclear regulatory administrator to exercise sound judgment on all nuclear safety matters.

Moreover, the Congressional oversight process and the openness of the agency's licensing and enforcement processes would tend to negate any such influence.

QUESTION 8. On a related matter, opponents of the single administrator idea have argued that, with the change in administrations, the "politics" of the agency will shift violently, as different Presidents appoint administrators with fundamentally different views about nuclear power. Yet, again, as I look at the other health and safety agencies in the executive branch, the heads of those agencies have, by and large, come from the mainstream of the regulatory community. To what extent is this potential for violent changes in policy direction a real concern?

ANSWER.

While a change in administrations could result in significant policy changes, most NRC regulatory requirements are imposed through rulemaking, and it takes some time for an agency to prepare a proposed rule, solicit and evaluate public comments, and prepare a final rule.

Considering the mission of the agency to protect the public health and safety, it is unlikely that sharp departures from dedicated efforts to accomplish that goal would be permitted. As noted earlier, additional checks and balances are provided by Congressional oversight and by the historic openness of the agency's processes. Finally, the agency's professional career staff would continue to exercise a strong role in the execution of the agency's mission, and this would provide internal checks and balances.

Commissioner Asselstine adds:

Under a single administrator, changes in policy direction could come as soon as he or she is confirmed. Whereas under a commission form, policy changes would be more gradual. One should consider whether the nuclear industry, with its particular need for predictability and stability, would be best served by a regulatory system that is subject to wide and rapid fluctuations. Finally, it is worth noting that under S.1235, senior staff officers would be replaced by political appointees, further reducing the continuity and stability of regulatory policies.

QUESTION 9. On the question of public participation in the decision-making process and public visibility of the actions of the Commission, please comment on whether the broad public interest--beyond the self-styled handful of Washington-based "public interest" groups--is better served by the existing collegial approach or by a single administrator?

ANSWER.

Because the Commission is subject to the Government in the Sunshine Act, most of its meetings are open to the public. This permits the public to observe Commission deliberations and makes Commission actions highly visible. An Administrator would not be subject to the Sunshine Act and, accordingly, there would undoubtedly be fewer public meetings. Nonetheless, the agency's final actions would continue to be highly visible as the agency would continue to publish adjudicatory and rulemaking decisions and would make documents available in its public document room.

The majority of the Commission believes that public participation with a single administrator would be comparable to that under current practice. Members of the public would be able to participate in the Commission's adjudicatory and rulemaking proceedings, and would be able to request institution of enforcement proceedings under 10 C.F.R. 2.206. Since members of the public are generally permitted to observe, but not participate, in the Commission's public meetings, a change to a administrator similarly would not alter the degree of public participation.

In sum, to the extent that public participation improves the quality of agency decisions, and thus serves the public interest, the majority of the Commission does not expect a significant difference in the role or degree of public participation as the result of replacing the Commission with a single administrator.

Commissioner Asselstine adds:

Commissioner Asselstine continues to believe, as he stated in his testimony, that a single administrator organization, particularly if coupled with the Commission's licensing reform, and in the absence of a safety board and an inspector general, would result in a much more closed decisionmaking process with fewer opportunities for public involvement.

QUESTION 10. In many cases, the matters of greatest public interest are often the licensing proceedings for individual reactors, where the local public becomes actively involved. If we retain the basic adjudicatory framework for these licensing proceedings under a single administrator, what sacrifice, if any, are we making in the amount of public participation?

ANSWER.

There would be no change in the opportunities for public participation.

Commissioner Asselstine adds:

Commissioner Asselstine adds that there would be changes in the opportunities for public participation if the Commission's licensing reform legislation were enacted. He further notes that a single administrator who is more directly involved in the day-to-day management of the staff may be less able to serve as a credible and objective judge in individual licensing proceedings. If the Congress decides to enact single administrator legislation, it may wish to consider making the agency's Atomic Safety and Licensing Appeal Panel decisions final agency actions.

QUESTION 11. In 1980, Reorganization Plan No. 1 of 1980 was issued by the Carter Administration, in response to the concerns raised by the post-TMI investigations. To what extent, if any, has this plan been effective in addressing the concerns that Kemeny and Rogovin raised?

ANSWER.

While the Reorganization Plan has been somewhat effective in addressing the concerns of Kemeny and Rogovin by increasing the powers of the chairman, under the Plan all adjudicatory, rulemaking and policy decisions continue to be made by the collegial body. Moreover, in most situations, the collegial body itself has the authority to define which questions it must decide. As noted in our responses to earlier questions, the majority of Commissioners believe that the agency would be better managed if it were headed by a single administrator. One individual would then be held accountable for its management.

Commissioner Asselstine adds:

Commissioner Asselstine believes that there is nothing now that would prohibit the Chairman from taking a more active role in the day-to-day management of the staff. The Chairman should then be held accountable for carrying out the policy decisions of the Commission.

QUESTION 12. In the interest of balancing the need for independent regulation against the proposal to replace the Commission with an independent single administrator within the executive branch, please comment on the merits of a comprehensive regulatory reform package that would include--(1) the single administrator proposal; (2) an Inspector General to carry out the responsibilities of the NRC's existing Office of Inspector and Auditor; (3) a fact-finding nuclear safety board; and (4) standardization legislation? Would an approach like this contain the essential elements necessary to restore credibility and effectiveness to nuclear regulation, while at the same time striking that delicate balance between the executive and legislative branches?

ANSWER.

If given a choice the Commission would prefer that the Inspector General proposal not be included in the comprehensive package.

The Commission is evenly divided on whether a nuclear safety board should be established if the NRC were reconstituted to be headed by a single administrator.

Nonetheless, the majority of the Commission might consider a comprehensive legislative approach that included, a single administrator, licensing reform, and acceptable provisions for an Inspector General reporting to the Administrator or a nuclear safety board (possibly replacing the Advisory Committee on Reactor Safeguards), or both.

In sum, Chairman Zech and Commissioner Roberts support a single administrator and licensing reform legislation, but oppose the Inspector General and Nuclear Safety Board proposals.

Commissioner Asselstine supports establishment of an Inspector General, creation of a Nuclear Safety Board, and standardization legislation, but opposes the single administrator proposal.

Commissioner Bernthal supports the single administrator proposal and licensing reform. He supports a nuclear safety board only if a single administrator agency is created. He opposes the Inspector General proposal.

Commissioner Asselstine adds:

Attached is Commissioner Asselstine's recent testimony before the Subcommittee on Energy and the Environment of the House Committee on Interior and Insular Affairs, which addresses licensing reform and other proposals before the Congress.

QUESTION 13. Some persons believe, as indicated in a recent article in Forbes magazine, that although there may be some problem with NRC, the major problems with the nuclear industry can be attributed to mismanagement by utilities and design and construction firms.

To what extent do you think that the problems of the nuclear industry are caused primarily by industry mismanagement rather than by problems with the NRC?

Similarly, to what extent do you think that organizational changes within the NRC will help solve, in a significant manner, many of the present problems of the nuclear industry?

ANSWER.

Nuclear industry problems have been attributed to a variety of factors including complex designs, mismanagement and NRC's regulatory process. While some may argue that NRC has contributed in some degree to recent problems (e.g., TVA facilities) by not identifying nuclear safety problems earlier or by not taking more decisive action, the primary responsibility and accountability for nuclear safety rests with utility management. While the NRC's regulatory programs are not perfect, it is important to note that most reactor units have been constructed and are operating today in accordance with NRC requirements and without significant nuclear safety problems. This is testimony to generally good to excellent utility management. However, where significant problems in construction or operations have occurred, the performance of top utility management must be regarded as a primary contributor.

In April 1984, the NRC completed a congressionally-mandated study of quality and quality assurance (QA) in the design and construction of nuclear power plants. The staff's report entitled "Improving Quality and the Assurance of Quality in the Design and Construction of Nuclear Power Plants," (NUREG-1055), concluded that the primary cause of the quality-related problems in the nuclear industry was shortcomings in utility management. The staff noted that "The overriding, predominant conclusion of this report is that the common cause of poor quality in nuclear power plant construction is poor management by the responsible licensees---the utilities. It follows that the solution to the problem must also lie with utility management." (NUREG-1055, p. 2-40) Organizational changes might improve NRC performance as a regulatory agency. However, these changes will not themselves cure and correct problems which have their "root" causes in shortcomings in nuclear utility management.

QUESTION 14. Of those government officials recently surveyed by the Administrative Conference, officials at the NRC were among those who viewed the Sunshine Act most negatively. (See Implementation and Effects of the Federal Government in the Sunshine Act, Administrative Conference of the United States, June 1984, p. 77; see also SECY-84-302). The study suggested that one reason for this was the dispositions of agency leadership, age of the agency, and tradition. Do you have any comments or thoughts as to why NRC officials are among those that perceive the Sunshine Act most negatively?

ANSWER.

The Administrative Conference Study to which the question refers was issued more than two years ago, and reflected surveys conducted some time before that. The best guide we have to the thinking of other agencies' leadership at the present time is the recently issued report of the Government in the Sunshine Act Task Force of the Administrative Law Section of the American Bar Association. That report stated:

> But the fact is that the Sunshine Act has had an inhibiting effect on the initiation of discussions among agency members. This is the conclusion of the Welborn Report, and it is confirmed by out meeting with agency general counsels. Quite apart from theevident preference of many members for closed meetings, the sheer logistical difficulties in invoking the machinery of the Act has made difficult if not impossible the maintenance of close day-to-day working relationships in those agencies, by far the majority, where three or even two members constitute a quorum. Task Force Report, p. 11.

Elsewhere, the report stated:

> [T]here is ample evidence that Sunshine requirements have discouraged the holding of meetings on a broad range of subjects and inhibited the freedom of expression at such meetings as are held. Task Force Report, p. 13.

We are by no means sure that the views of NRC officials on the Act's effects are any more negative than those of other agencies' leaders, as of mid-1986. To the extent that the NRC appeared more negative about the Sunshine Act's effects in 1984 than did some other agencies, it might well have been a reflection of the fact that the NRC, both in its regulations and in its application of the regulations, interpreted the Sunshine Act extremely restrictively--perhaps more so than some other agencies. The Commission agrees with the comment of Chairman Morris K. Udall of the House Committee on Interior and Insular Affairs that "this Commission has been handicapped unduly by strict observance, overly strict observance" of the Sunshine Act. Oversight Hearing on the Nuclear Regulatory Commission Budget Request for Fiscal Year 1987, February 6, 1986. A rule change designed to bring the Commission's application of the Sunshine Act into conformity with Congressional intent, as stated by the Supreme Court in its unanimous decision in ITT World Communications v. Federal Communications Commission, 466 U.S. 463 (1984), is currently pending before the Commission.

Commissioner Asselstine adds:

Commissioner Asselstine continues to believe that the Sunshine Act does not impose an undue restriction on the NRC's operation.

QUESTION 15. Do you believe that decisions of the NRC or an agency with a single administrator regarding what levels of protection are adequate for public health and safety should take into account political decisions regarding to what extent the federal government should promote or encourage the use of nuclear power?

ANSWER.

No. The regulatory agency should focus its decisions on public health and safety considerations.

QUESTION 16. One of the reasons for the abolition of the AEC and the creation of the NRC was the conflict of interest between the promotional and regulatory responsibilities of the AEC. If the NRC were converted into an agency with a single administrator under the direct control of the executive branch, would it be possible to separate the promotional policies of the executive from the purely regulatory functions of the agency charged with the protection of the public health and safety?

ANSWER.

Yes. The duties of the Administrator would be defined by statute. If the Administrator is enjoined from promotion by statute, the Executive Branch could not compel the Administrator to violate the statute. The Administrator responsibility would be to manage the regulatory agency whose mission is to protect the public health and safety.

Commissioner Asselstine adds:
Commissioner Asselstine is concerned, however, with at least the appearance of a conflict of interest in the licensing of a high level waste repository where the licensee (DOE) and the licensing agency are both under the Executive Branch. In that case, the licensing single administrator would be required to rule on an application supported by a Cabinet member for a proposal which had been previously approved by the President.

QUESTION 17. Would changing the NRC into an agency with a single administrator in the executive branch diminish the agency's accountability and responsiveness to the Congress?

ANSWER.

Such a change would not diminish the agency's accountability and responsiveness to the Congress. These are embedded in the Atomic Energy Act of 1954, as amended.

Commissioner Asselstine adds:

Commissioner Asselstine adds that with a single administrator, accountability may well be improved-- at least Congress would know who to blame for failures. As for responsiveness, he believes this would depend on the individual.

QUESTION 18. Your written testimony speaks entirely of measures designed to improve efficiencies and avoid inefficiencies in the regulatory process. There is no mention of their effects on or the values of public participation in the regulatory process, utility accountability, or improved protection afforded to the public health and safety. These are values and goals at least as, if not more, important than efficiency or collegiality.

(a) Has the Commissioner considered the impacts of these proposals on the public health and safety or public participation in the regulatory process?

(b) Does the Commission believe that there is no need for any additional legislation improving utility accountability or protection to public health and safety?

(c) In March, 1985, the Commission transmitted to Congress a recommendation to amend section 206 of the Energy Reorganization Act of 1974 to require firms supplying nuclear materials or constructing nuclear components to report any known defects or regulatory violations. Does the Commission still support this proposal?

ANSWER.

The Commission believes that creation of a single administrator agency should not have adverse affects on the public health and safety. In fact public health and safety could be enhanced because, with a single agency head, staff could be given clearer guidance on priorities, decisive action could be taken more quickly, and a single individual could be held accountable for the agency's actions. As noted in response to question 10, creation of a single administrator agency would not reduce opportunities for public participation in the decision-making process.

The Commission does not believe that there is a need for additional legislation to improve utility accountability. The utilities are acutely aware of their responsibility to protect the public health and safety and the financial and other consequences of a nuclear accident. Under the circumstances, we doubt if a legislative mandate would do much to improve accountability.

The Commission continues to support enactment of the proposed amendments to Section 206 of the Energy Reorganization Act.

Commissioner Asselstine adds:

Commissioner Asselstine agrees that the values of public participation in the regulatory process, utility accountability, and improved protection to the public health and safety are much more important considerations than simple efficiency. He believes that these values will be much more affected, for good or for ill, by the capabilities, competence and attitudes of the agency's senior management than by the agency structure. Moreover, in light of recent experience, he believes that there is a clear need to improve the attitudes and accountability of some utilities for the safe operation of nuclear power plants. His testimony attached to Question 12 points to a number of suggestions in this regard.

QUESTION 19. The Commission cites the Rogovin and Kemeny Reports in support of its testimony favoring a single administrator. Both of those reports also recommended that an additional, independent organization with oversight authority and capability regarding the NRC be established if the single administrator concept were adopted.

(a) Do you believe that a nuclear regulatory agency with a single administrator should be accompanied by an independent oversight agency?

(b) Similarly, should a nuclear regulatory agency with a single administrator be created with an independent inspector general?

ANSWER.

The Commission opposes creation of an independent oversight agency. (We construe your question to mean something other than a nuclear safety board charged with investigating and analyzing nuclear incidents.) The agency managed by an Administrator can successfully carry out its statutory mission efficiently and effectively and Congress would continue to provide oversight.

The remainder of your question is addressed in our response to Question 12.

Commissioner Asselstine adds:

Commissioner Asselstine supports the creation of a Nuclear Safety Board for the reasons stated in his prepared testimony.

STATEMENT OF SENATOR ALFONSE D'AMATO
BEFORE THE SUBCOMMITTEE ON NUCLEAR REGULATION
JUNE 17, 1986

MR. CHAIRMAN, I APPRECIATE THE OPPORTUNITY TO BE HERE TODAY TO DISCUSS S. 2471, THE IMPROVED NUCLEAR STANDARDS ACT. THIS LEGISLATION ADDRESSES CONCERNS VITAL TO THE HEALTH AND SAFETY OF EVERY AMERICAN LIVING NEAR A NUCLEAR FACILITY.

I ALSO WANT TO COMMEND YOU, MR. CHAIRMAN, FOR HOLDING THIS HEARING TO ADDRESS VARIOUS NUCLEAR SAFETY AND LICENSING ISSUES. THE ACCIDENT AT THE CHERNOBYL NUCLEAR POWER STATION HAS SHOWN US THAT THE POSSIBLITY OF A SERIOUS RADIOACTIVE RELEASE AT A NUCLEAR FACILITY IS NOT MERELY THEORETICAL. IT CAN HAPPEN.

THE CHERNOBYL INCIDENT HAS UNDERSCORED THE NEED TO LOOK FOR WAYS TO ENSURE THAT NUCLEAR POWER PLANTS USE THE SAFEST POSSIBLE DESIGN, CONSTRUCTION METHODS, OPERATING TECHNIQUES, AND EVACUATION PLANS. THIS INCLUDES ASSURANCES THAT LAWS CURRENTLY ON THE BOOKS ARE ADHERED TO, AND THAT MODIFICATIONS TO THE LAW WHICH CAN FURTHER ASSURE OUR CITIZENS THE SAFETY TO WHICH THEY ARE ENTITLED ARE MADE AS SOON AS NEW INFORMATION OR IMPROVED METHODS BECOME AVAILABLE.

THE SOVIET UNION FLATLY INGNORED THE RIGHT OF ITS CITIZENS TO LIVE IN A FREE AND SAFE SOCIETY. WE MUST BE SURE THAT THIS NEVER HAPPENS HERE.

S. 2471, WHICH I INTRODUCED ON MAY 20, CONTAINS FIVE MAIN PROVISIONS.

1. IT CREATES THE POSITION OF INSPECTOR GENERAL AT THE NUCLEAR REGULATORY COMMISSION. THIS POSITION WILL BE APPOINTED BY THE PRESIDENT AND CONFIRMED BY THE SENATE. THE PRESIDENT WILL BE REQUIRED TO APPOINT A CANDIDATE WITH EXPERTISE IN NUCLEAR SAFETY ISSUES. IT COMBINES FUNCTIONS CURRENTLY PERFORMED BY TWO OFFICES AT THE NRC: THE OFFICE OF INSPECTOR AND AUDITOR, AND THE OFFICE OF INVESTIGATIONS.

IN ADDITION TO THE CUSTOMARY AUTHORITY PROVIDED ALL OTHER INSPECTORS GENERAL, SUCH AS MANAGEMENT AND EFFICIENCY AUDIT RESPONSIBILITIES, THE NEW NRC INSPECTOR GENERAL ALSO WILL HAVE THE AUTHORITY AND RESPONSIBILITY TO REVIEW ALL SAFETY PROCEDURES AT THE NRC TO ENSURE THAT THE BEST AVAILABLE STANDARDS ARE BEING MET. THE INSPECTOR GENERAL WILL MAKE AN ANNUAL REPORT TO CONGRESS REGARDING THE ADEQUACY OF THESE STANDARDS. HE/SHE ALSO WILL BE AUTHORIZED TO PROPOSE NEW REGULATIONS AND MODIFICATIONS TO EXISTING REGULATIONS FOR THE PURPOSE OF ENSURING THE PUBLIC SAFETY.

MR. CHAIRMAN, BEFORE I PROCEED TO THE OTHER PROVISIONS IN S. 2471, I WOULD LIKE TO POINT TO SOME SPECIFIC EXAMPLES AS TO WHY I BELIEVE IT IS IMPORTANT TO ESTABLISH THIS INSPECTOR GENERAL

POSITION. WE ARE ALL FAMILIAR WITH THE FACT THAT THE NRC ALREADY HAS AN OFFICE OF INVESTIGATIONS TO EXAMINE CHARGES OF WRONGDOING AT NUCLEAR POWER PLANTS. THIS OFFICE, HOWEVER, HAS BEEN WIDELY CRITICIZED. MANY PEOPLE BELIEVE THAT TOP NRC OFFICIALS HAVE SOUGHT TO RESTRICT THIS OFFICE, MAKING IT DIFFICULT FOR THE OFFICE OF INVESTIGATIONS TO ACCOMPLISH ITS MISSION.

NRC COMMISSIONER JAMES ASSELSTINE, WHO SUPPORTS THE CONCEPT OF AN INSPECTOR GENERAL AT THE NRC, HAS BEEN QUOTED AS SAYING THAT "THE AGENCY HAS HAD A LOT OF TROUBLE IN DEALING WITH WRONGDOING. THERE HAS BEEN TOO MUCH OF A CLOSENESS WITH INDUSTRY."

LAST YEAR, ASSISTANT ATTORNEY GENERAL STEVE TROTT SAID IN A LETTER TO NRC CHAIRMAN PALLADINO THAT "SENIOR PERSONNEL" AT THE NRC HAD DISPLAYED "OPPOSITION AS WELL AS RESISTANCE...TO THE DETECTION AND DISCLOSURE OF DELIBERATE WRONGDOING BY NRC LICENSEES."

FORMER COMMISSIONER VICTOR GILINSKY CALLS THE NRC "AN AGENCY OF TECHNICAL PEOPLE, ENGINEERS WHO ARE NOT ORIENTED TOWARD DEALING WITH WRONGDOING. THEY'RE UNCOMFORTABLE IN THE ROLE OF POLICEMAN."

MR. CHAIRMAN, I'D LIKE TO QUOTE TWO PARAGRAPHS FROM AN APRIL 8, 1986, WASHINGTON POST ARTICLE WHICH ILLUSTRATE THE PROBLEM. IT DEALS WITH THE FERMI NUCLEAR PLANT IN MICHIGAN. LAST JULY 10, SENIOR NRC OFFICIALS PRAISED THE PLANT'S OWNER, DETROIT EDISON CO., AND AWARDED THE UTILITY A LICENSE TO BEGIN FULL-POWER OPERATIONS. THE ARTICLE GOES ON TO DESCRIBE WHAT HAPPENED NEXT:

> "BUT THE COMMISSION SOON LEARNED OF A DISTURBING INCIDENT JUST EIGHT DAYS EARLIER, WHEN AN OPERATOR AT THE MICHIGAN PLANT TRIGGERED A PREMATURE CHAIN REACTION BY IMPROPERLY REMOVING CONTROL RODS FROM THE NUCLEAR REACTOR. THE UTILITY TOLD THE NRC THERE HAD BEEN AN ERROR IN THE CONTROL ROOM, BUT AT FIRST DENIED THAT THE REACTOR WENT TO 'CRITICAL' STATUS, GENERATING ENOUGH HEAT TO ACHIEVE FULL POWER.
>
> NRC INVESTIGATORS HAVE CHARGED IN A PRELIMINARY REPORT THAT DETROIT EDISON MADE "MATERIAL FALSE STATEMENTS" BY WITHHOLDING DETAILS OF THE INCIDENT UNTIL AFTER THE FULL-POWER LICENSE WAS GRANTED, AN ALLEGATION THE UTILTIY DENIES. BUT SENIOR NRC STAFF MEMBERS HAVE DELAYED THE OFFICE OF INVESTIGATIONS' PROBE FOR WEEKS BY CHALLENGING THE INVESTIGATORS' PLAN TO REFER IT TO THE JUSTICE DEPARTMENT FOR POSSIBLE PROSECUTION."

FINALLY, A FEW DAYS AGO, THIS CASE WAS SENT TO THE JUSTICE DEPARTMENT. YET IT TOOK FROM OCTOBER OF 1985 UNTIL JUNE OF 1986 FOR THE OFFICE OF INVESTIGATIONS TO GET THIS CASE THROUGH THE SENIOR STAFF AT THE NRC TO THE JUSTICE DEPARTMENT.

WE CANNOT TOLERATE A SITUATION WHERE THE STAFF OF THE OFFICE OF INVESTIGATIONS IS CONSTANTLY FRUSTRATED IN THEIR ATTEMPTS TO

REFER CASES TO THE JUSTICE DEPARTMENT. WE CANNOT TOLERATE HAVING THEIR CONCLUSIONS SECOND-GUESSED BY OTHER OFFICES WITHIN THE NRC. WE CANNOT TOLERATE THE INCREDIBLE BUREAUCRACY WHICH HAS BEEN IMPEDING THE EFFECTIVENESS OF THIS OFFICE. MR. CHAIRMAN, I BELIEVE IT IS CLEAR THAT WE NEED TO GIVE THE NRC AN INSPECTOR GENERAL WITH THE NECESSARY INDEPENDENCE TO PURSUE INVESTIGATIONS, PROPOSE IMPROVEMENTS, AND REPORT DIRECTLY TO THE CONGRESS.

THE OTHER MAJOR FEATURES OF THE LEGISLATION I HAVE PROPOSED ARE EQUALLY IMPORTANT.

2. S. 2471 EXPANDS THE ROLE OF THE INSPECTOR GENERAL CURRENTLY AT THE FEDERAL EMERGENCY MANAGEMENT AGENCY TO ALLOW HIM TO REVIEW STANDARDS AND PROCEDURES REGARDING EMERGENCY EVACUATION PLANS FOR NUCLEAR POWER FACILITIES, AND FOR BOTH THE INSPECTOR GENERAL AND THE DIRECTOR OF FEMA TO MAKE RECOMMENDATIONS DIRECTLY TO CONGRESS REGARDING THE ADEQUACY OF THESE STANDARDS AND PROCEDURES AND THEIR IMPLEMENTATION.

3. IT REQUIRES FEMA TO CONDUCT AN ANNUAL TEST OF THE EVACUATION PLAN FOR EACH OPERATING NUCLEAR POWER FACILITY IN THE UNITED STATES. CURRENTLY, THESE TESTS ARE CONDUCTED ONCE EVERY TWO YEARS, EVEN THOUGH ONCE-A-YEAR TESTS WERE THE STANDARD UNTIL LAST YEAR.

4. IT REQUIRES THAT, AS PART OF THE LICENSING PROCEDURE FOR EVERY COMMERCIAL NUCLEAR POWER FACILITY, FEMA MUST MAKE A FINDING

That the public safety can be assured by the evacuation plan. This finding also will be required after each annual test. If FEMA cannot make this finding, then the plant must cease operation until corrective measures have been taken, until a new test has been conducted, and until the finding that public safety can be assured has been made.

This provision is particularly applicable to Shoreham, the controversial nuclear power plant on Long Island in New York, where FEMA's report contains no such finding, and for which the NRC will be making its licensing decision without a recommendation from FEMA.

5. Finally, S. 2471 requires that utilities bear all non-Federal costs associated with the annual testing of emergency evacuation plans. Currently, these large costs are often borne by State and local governments, that is, by homeowners and local taxpayers.

Mr. Chairman, many of our citizens live in fear. Unfortunately, this is a justified fear. Americans question whether what happened at Chernobyl could happen here. It is my hope that, by consideration of these proposals and other proposals being discussed today, we can take a major step toward reassuring our citizens.

Thank you, Mr. Chairman.

STATEMENT OF SENATOR JOSEPH R. BIDEN, JR.
JUNE 17, 1986
NUCLEAR REGULATION SUBCOMMITTEE

MR. CHAIRMAN, THANK YOU FOR THE OPPORTUNITY TO TAKE PART IN THE SUBCOMMITTEE'S HEARINGS ON PROPOSALS TO REFORM THE STRUCTURE OF THE NUCLEAR REGULATORY COMMISSION. A CLOSE, CRITICAL EXAMINATION OF OUR REGULATION OF THE NUCLEAR INDUSTRY IS NEEDED AND I SUPPORT THE SUBCOMMITTEE'S EFFORTS TO DEBATE THE SAFETY ISSUES. WE MAY NEED TO MAKE SOME MAJOR CHANGES IN THE NRC SO THAT IT CAN CARRY OUT ITS RESPONSIBILTIES.

AS YOU KNOW, I RECENTLY INTRODUCED LEGISLATION TO ESTABLISH AN INDEPENDENT SAFETY BOARD FOR THE NRC. RATHER THAN DISCUSS DETAILS OF THE BILL TODAY, I WOULD INSTEAD LIKE TO TALK FOR A FEW MINUTES ABOUT WHY THE CREATION OF A SAFETY BOARD IS, IN MY OPINION, THE APPROPRIATE RESPONSE TO CURRENT SAFETY PROBLEMS.

THE SAFETY BOARD IS NOT A NEW PROPOSAL, BUT IT HAS BEEN GAINING INCREASING SUPPORT IN THE NUCLEAR COMMUNITY AS THE RECURRANCE OF ACCIDENTS AT NUCLEAR PLANTS HAS INDICATED A NEED FOR IMPROVEMENTS IN THE PRESENT REGULATORY STRUCTURE.

FRANKLY, CONGRESS HAS LAGGED BEHIND IN RECOGNIZING THE VALUE OF A SAFETY BOARD. DURING THE EXISTANCE OF THE ATOMIC ENERGY COMMISSION, CHAIRMAN DIXIE LEE RAY TOOK A TENTATIVE FIRST STEP OF SPLITTING RESPONSIBILITY FOR REACTOR SAFETY FROM THE OTHER AGENCY DUTIES IN 1973. UNFORTUNATELY, THE SAFETY DIVISION WAS NOT YET FIRMLY ESTABLISHED WHEN THE COMMISSION WAS REORGANIZED THE NEXT YEAR.

THE NEED FOR AN INDEPENDENT BOARD REMAINED AFTER THE CREATION OF THE NRC IN 1974, BUT IT DID NOT MOVE BACK INTO THE SPOTLIGHT UNTIL THE KEMENY COMMISSION, IN ITS REPORT ON THREE MILE ISLAND, RECOMMENDED "AN OVERSIGHT COMMITTEE ON NUCLEAR REACTOR SAFETY ... TO EXAMINE ON A REGULAR BASIS THE PERFORMANCE OF THE AGENCY AND THE NUCLEAR INDUSTRY."

LAST YEAR, A REPORT ON THE NRC'S SAFETY AND ACCIDENT INVESTIGATION PRACTICES PREPARED BY BROOKHAVEN NATIONAL LABORATORY FOR THE NRC RECOMMENDED "AN INVESTIGATORY SYSTEM PATTERNED AFTER THE NATIONAL TRANSPORTATION SAFETY BOARD...TO DETERMINE THE CAUSE OF EVENTS AND RECCOMMEND IMPROVEMENTS."

TIME AND TIME AGAIN, WHEN THE SAFETY COMMITMENT OF THE NRC IS UNDER SCRUTINY, OBSERVERS REACH THE SAME CONCLUSION -- A BOARD DEVOTED SOLELY TO SAFETY NEEDS TO BE PART OF THE REGULATORY STRUCTURE.

SO FAR, IT HAS NOT BEEN DONE. THE NRC HAS NOT YET PUT IN PLACE THE TYPE OF SAFETY BOARD CALLED FOR BY THE KEMENY AND BROOKHAVEN REPORTS.

FOR EXAMPLE, AFTER THE THREE MILE ISLAND ACCIDENT, THE NRC ESTABLISHED AN OFFICE TO ANALYZE OPERATIONAL DATA FROM NRC FACILITIES, AND LOOK FOR POTENTIAL TROUBLE SPOTS. BUT THAT OFFICE WAS NEVER GIVEN THE RESOURCES IT NEEDED TO LIVE UP TO ITS POTENTIAL. IT LENDS THE APPEARANCE OF A COMMITMENT TO SAFETY, BUT IN FACT, HAS LITTLE IMPACT.

AFTER THE BROOKHAVEN REPORT, THE NRC TRIED TO ADDRESS THE PROBLEMS BY ESTABLISHING AD-HOC "INDEPENDENT INVESTIGATORY TEAMS" TO LEAD REVIEWS OF MAJOR ACCIDENTS AT NUCLEAR PLANTS. THE INITIAL REPORTS WERE AN IMPROVEMENT ON EARLIER PRACTICES, BUT TOO MANY OF THE UNDERLYING PROBLEMS THAT HAVE PLAGUED THE NRC FOR MORE THAN A DECADE REMAIN UNCORRECTED. THE NRC STAFF IS STILL INVESTIGATING ITS OWN ROLE IN ACCIDENTS, THE PUBLIC STILL DOUBTS THE COMMITMENT TO SAFETY, AND A PERMANENT MECHANISM TO PUSH FOR SAFETY IMPROVEMENTS IS STILL MISSING.

THE CREATION OF AN INDEPENDENT SAFETY BOARD CANNOT ENSURE THAT PUMPS WILL NOT BREAK, OR THAT VALVES WILL NOT GET STUCK. BUT THESE OCURRANCES ARE OFTEN THE SYMPTOM OF THE PROBLEM. THE SAFETY BOARD GOES TO THE ROOT OF MOST OF THE ACCIDENTS AT OUR NATION'S NUCLEAR POWER PLANTS -- AN INADEQUATE CONCERN FOR SAFETY THAT ALLOWS FAULTY PUMPS,VALVES AND MANAGEMENT PRACTICES TO CONTINUE EVEN AFTER THEY ARE RECOGNIZED.

I WANT TO MAKE CLEAR THAT THE 'LAUNCH FIRST, SAFETY SECOND' -- IF I CAN BORROW THAT PHRASE FROM THE CHALLENGER INVESTIGATION -- IS NOT AN ATTITUDE THAT SUDDENLY APPEARED WITH THE PRESENT ADMINISTRATION. FOR YEARS THERE HAS BEEN A SLOW, BUT RELENTLESS SHIFT AWAY FROM SAFETY IN THE NUCLEAR REGULATORY AGENCY.

I WOULD LIKE TO POINT TO THREE CLEAR EXAMPLES OF NRC ACTIONS THAT RUN CONTRARY TO WHAT MOST OF US WOULD CONSIDER A SAFETY PRIORITY. I DOUBT IF ANYONE OUTSIDE THIS HEARING ROOM KNEW ANYTHING ABOUT THESE ACTIONS, BUT I AM SURE THE PUBLIC WOULD BE DUMBFOUNDED OVER WHAT HAS BEEN GOING ON IN THE NUCLEAR INDUSTRY IN THIS COUNTRY.

IT IS A LITTLE-KNOWN FACT THAT THE EARLY, SMALLER NUCLEAR POWER PLANTS WERE DESIGNED WITH THE OBJECTIVE OF ENSURING THAT THE REACTOR CONTAINMENT STRUCTURE WOULD FUNCTION AS AN EFFECTIVE, INDEPENDENT BARRIER AGAINST THE RELEASE OF HARMFUL RADIOACTIVE SUBSTANCES EVEN IF THE REACTOR WERE TO SUFFER A MELTDOWN OF THE CORE. HOWEVER, AS THE INDUSTRY PURSUED ECONOMIES OF SCALE TO DEVELOP THE LARGER AND MORE POWERFUL PLANTS, IT BECAME APPARENT THAT CONTAINMENT FAILURE WOULD BE THE LIKELY CONSEQUENCE OF THE FULL MELTDOWN OF THE CORE OF A LARGE REACTOR.

AT THAT TIME THE ATOMIC ENERGY COMMISSION AND THE INDUSTRY DECIDED TO GIVE UP ON THE CONSERVATIVE DESIGN REQUIREMENT THAT HAD BEEN APPLIED TO THE EARLY SMALL REACTORS

-- DROPPING A STRONGER DEFINITION OF CONTAINMENT THAT MOST PEOPLE STILL BELIEVE IS IN EFFECT TODAY. UNDER THE NEW INTERPRETATION THE LARGER REACTOR CONTAINMENT VESSELS WOULD NOT BE REQUIRED TO WITHSTAND A FULL CORE MELTDOWN. IT WAS ASSUMED THAT OTHER SAFETY SYSTEMS IN THE PLANT WOULD WORK PROPERLY TO PREVENT A FULL MELTDOWN. CORE MELTDOWNS WOULD BE SO UNLIKELY THAT THEY COULD BE CONSIDERED INCREDIBLE.

THE THREE MILE ISLAND ACCIDENT PROVED THAT IS NOT THE CASE. THAT ACCIDENT GAVE US THE OPPORTUNITY TO REASSESS THE RISK OF SERIOUS NUCLEAR ACCIDENTS AND, IN PARTICULAR, TO RECONSIDER THE NEED FOR ADDITIONAL MEASURES TO PREVENT MELTDOWNS AND LARGE RADIATION RELEASES.

THE KEMENY COMMISSION WHICH LOOKED INTO THE ACCIDENT STRONGLY RECOMMENDED JUST SUCH A CHANGE. THE NRC MADE A GOOD BEGINNING IN ITS REASSESSMENT OF THE MELTDOWN RISK AT U.S. PLANTS, BUT SOMEWHERE ALONG THE WAY THE INITIATIVE WANED. SEVERAL DECISIONS LAST YEAR LEAD ME TO BELIEVE THAT THE NRC AND THE NUCLEAR INDUSTRY HAVE RETURNED TO THE OLD ATTITUDES OF UNSUPPORTED OPTIMISM THAT WERE SO EVIDENT BEFORE THE THREE MILE ISLAND ACCIDENT.

ANOTHER EXAMPLE IS THE DECISION REGARDING THE SEVERE ACCIDENT RISK AT THE INDIAN POINT PLANTS IN NEW YORK. DESPITE PROJECTIONS OF SEVERE CONSEQUENCES FROM A MELTDOWN AT INDIAN POINT INVOLVING A RELEASE OF RADIATION, AND DESPITE LONG-STANDING DIFFICULTIES IN PROVIDING ADEQUATE EMERGENCY PLANNING FOR THE HEAVILY POPULATED AREA AROUND INDIAN POINT, THE COMMISSION DECLARED THE TWO REACTORS ACCEPTABLY SAFE. ALL OF THE PROPOSED SAFETY IMPROVEMENTS FOR THE PLANT -- INCLUDING THE RELATIVELY STRAIGHT-FORWARD SAFETY IMPROVEMENTS URGED BY THE NRC'S OWN TECHNICAL STAFF AND HEARING BOARD -- WERE REJECTED.

ACCORDING THE NRC STAFF, THESE IMPROVEMENTS WOULD HAVE CUT THE SEVERE ACCIDENT RISK AT INDIAN POINT IN HALF. THIS DECISION PROMPTED A CRITICAL LETTER FROM FIVE MEMBERS OF THE COMMISSION'S ADVISORY COMMITTEE ON REACTOR SAFEGUARDS. THE NRC'S OWN ADVISORS BELIEVED THE INDIAN POINT DECISION RAN INTO DIRECT CONFLICT WITH EFFORTS TO REDUCE THE RISK OF SEVERE ACCIDENTS.

COMPOUNDING THIS DECISION, THE COMMISSION THEN DECLARED ALL PLANTS ACCEPTABLY SAFE FOR THE FORESEEABLE FUTURE, AND ENDED FURTHER EFFORTS TO DEVELOP NEW SAFETY FEATURES FOR PLANTS THAT WOULD SUBSTANTIALLY REDUCE THE RISKS OF A MELTDOWN. THE MESSAGE TO STAFF IS UNMISTAKEABLE -- THE COMMISSION IS NOT INTERESTED IN IDEAS FROM STAFF ON IMPROVEMENTS IN SAFETY.

THE FINAL DECISION WAS THE ADOPTION OF A BACKFIT RULE WHICH RESTRICTS THE NRC'S ABILITY TO IMPOSE SAFETY REQUIREMENTS ON EXISTING PLANTS. THE EFFECT OF THE BACKFIT RULE IS TO CREATE A SERIES OF PROCEDURAL OBSTACLES TO

BACKFITTING EXISTING PLANTS. BY REQUIRING THE AGENCY TO PREPARE COST-BENEFIT ANALYSES, AND REQUIRING A DEMONSTRATION OF SUBSTANTIAL OVERALL IMPROVEMENT IN SAFETY, THE NEW BACKFIT RULE SHIFTS THE BURDEN OF PROOF TO THE PROPONENT OF NUCLEAR SAFETY.

THIS DECISION EFFECTIVELY OVERTURNS THE POLICY IN SUPPORT OF NEW SAFETY IMPROVEMENTS ADVOCATED BY THE PRESIDENT'S COMMISSION ON THE THREE MILE ISLAND ACCIDENT. THE BACKFIT RULE GUTS THE POLICY BY STACKING THE DECK AGAINST IMPROVED SAFETY BY INCLUDING IN THE COST-BENEFIT ANALYSIS EVERY CONCEIVABLE COST OF A SAFETY IMPROVEMENT AND BY FAILING TO INCLUDE SUCH OBVIOUS BENEFITS AS AVOIDING THE CONTAMINATION OF PUBLIC PROPERTY AND PREVENTING THE LOSS OF THE PLANT ITSELF.

RECENT OPERATING EXPERIENCE AT OUR OWN NUCLEAR PLANTS DEMONSTRATES THAT THERE IS NO REASON TO ADOPT A FEELING A COMPLACENCY ON NUCLEAR SAFETY. SERIOUS MISHAPS OCCURRED AT SEVERAL PLANTS LAST YEAR, INCLUDING THE DAVIS-BESSE PLANT NEAR TOLEDO, OHIO, THE RANCHO SECO PLANT NEAR SACRAMENTO, THE SAN ENOFRE UNIT 1 PLANT NEAR SAN CLEMENTE, AND TWO PLANTS IN THE TENNESSEE VALLEY AUTHORITY SYSTEM.

THE SUBCOMMITTEE IS FAMILIAR WITH THESE MISHAPS, WHICH SHUT DOWN EIGHT PERCENT OF OUR NATION'S OPERATING PLANTS BY THE END OF LAST YEAR. DESPITE THE MANY CHANGES THAT HAVE BEEN MADE SINCE THE THREE MILE ISLAND ACCIDENT, THESE MISHAPS STEMMED FROM SUCH PROBLEMS AS MULTIPLE EQUIPMENT FAILURES, COMPLETE LOSS OF SAFETY SYSTEMS, AND SIMPLE HUMAN ERRORS.

RECENT ACTIONS BY THE COMMISSION AND INDUSTRY CANNOT BE SQUARED WITH THE OPERATING RECORD OF NUCLEAR PLANTS LAST YEAR. THE HIGH STANDARDS FOR SAFETY THE PUBLIC ASSUMES ARE PRESENT ARE BEING QUIETLY DIMANTLED.

THE KEY TO THE FUTURE OF NUCLEAR POWER IS PERFORMANCE, AND AT A HIGHER LEVEL OF EXELLENCE THAN PRESENTLY EXISTS. THE BROOKHAVEN REPORT CITED THE INABILITY OF THE NRC AND INDUSTRY TO LEARN FROM THEIR OPERATING EXPERIENCE. THIS IS UNDERSTANDABLE SINCE INDUSTRY AND NRC'S TECHNICAL STAFF HAVE TO BE CRITICAL OF THEIR OWN PERFORMANCE TO GET TO THE ROOT CAUSE OF ACCIDENTS. UNBIASED INVESTIGATIONS SIMPLY CANNOT BE EXPECTED ON A RELIABLE BASIS UNDER THE CURRENT STRUCTURE.

THE CHERNOBYL ACCIDENT COMBINED WITH THE CLOSURE OF MANY OF OUR NATION'S NUCLEAR PLANTS FOR SAFETY REASONS, JUST LIKE THE CHALLENGER ACCIDENT AND THE NEAR SHUT DOWN OF OUR NATION'S SPACE PROGRAM, HAS SHAKEN THE PUBLIC'S CONFIDENCE -- RIGHTLY OR WRONGLY -- IN OUR ABILITY TO CONTROL TECHNOLOGICAL ADVANCES. THE CREATION OF AN INDEPENDENT SAFETY BOARD IS NEEDED TO RESTORE THE PUBLIC'S CONFIDENCE THAT THE COMPLEXITIES OF NUCLEAR TECHNOLOGY ARE UNDERSTOOD, AND TO REDRESS THE DRIFT TOWARD REGULATORY COMPLACENCY IN THE FACE OF RECURRING, SERIOUS MISHAPS TO THE CONTRARY.

MR. CHAIRMAN, I URGE THE SUBCOMMITTEE TO SUPPORT S. 2291 AS AN IMPORTANT STEP TOWARD ACHIEVING THE LEVEL OF EXCELLENCE WE ALL SEEK. AGAIN, I THANK YOU FOR THE OPPORTUNITY TO APPEAR HERE TODAY.

TESTIMONY OF
MITCHELL ROGOVIN

MAY 17, 1986

ROGOVIN, HUGE & LENZNER
WASHINGTON, D.C.

BEFORE THE
SENATE SUBCOMMITTEE ON NUCLEAR
REGULATION, SENATE COMMITTEE ON ENVIRONMENT
AND PUBLIC WORKS

Mr. Chairman, members of the Subcommittee on Nuclear Regulation, I am very grateful for the opportunity to testify in support of S. 1235, legislation to convert the Nuclear Regulatory Commission (NRC) into a single administrator agency.

I received my impressions of the NRC during the aftermath of the accident at Three Mile Island on March 28, 1979, when the Commission asked me to direct a Special Inquiry into the accident. Our task was to achieve the fullest possible understanding of the accident, both from a technical point of view and from the standpoint of how the NRC's own regulatory processes functioned. At the completion of the Inquiry, we made a full report and a series of recommendations and conclusions. One of those recommendations, and one about which I feel very strongly, is that the Nuclear Regulatory Commission should be replaced with an independent agency, run by a single administrator.

We found in the Nuclear Regulatory Commission an organization that is not so much badly managed as it is not managed at all. In our opinion, the Commission is incapable of managing a comprehensive national safety program for existing nuclear powerplants adequate to ensure public health and safety. A radical reorganization of the Commission's structure and management is long overdue.

The roots of this problem are historical, statutory and to some extent personnel-related. The NRC came into being in 1975 as a result of legislation that dismantled the old Atomic Energy Commission, transferring the AEC's promotional activities to the

Energy Research and Development Administration, now part of the Department of Energy, and its regulatory activities to the new NRC. The NRC was primarily constituted out of the AEC's former Directorate of Regulation, which had always been headed by a single director; the AEC commissioners themselves for years had little interest or direct involvement in the licensing of nuclear plants.

However, the new NRC was fashioned in the image of the old Commission itself and carried over a commission structure with five members, appointed by the President for five-year terms with the advice and consent of the State. According to the statute each of the five commissioners has "equal responsibility and authority in all the decisions and actions of the Commission."

As a practical matter, most of the functions of the NRC, including licensing of new reactors and inspection of operating plants, are carried out by the NRC staff. Obviously, one of the Commission's functions is to manage and set policy for its staff. But in practice the Commission has isolated itself from the NRC staff. The Commission does not directly supervise the staff's day-to-day work. It is not even officed in the same State: while the commissioners and their small personal staffs, together with some other Commission-level offices such as the General Counsel, are located in downtown Washington, NRC staff are scattered in a half-dozen office buildings in suburban Maryland, nearly an hour away by agency shuttle-bus. A strong "we-they" feeling has developed on both sides. In 1979, one commissioner characterized relations between the staff and the Commission as not unlike those between sovereign countries; cordial, somewhat distant, and conducted for the most part in writing, but always with the requisite formalities.

As for the Commission, the result of its statutorily prescribed structure is that it must function as a collegial body: it can make no decisions and take no action without a majority of the commissioners in agreement. In 1975, the original NRC legislation was amended to make the chairman of the Commission the "chief executive officer" with rather vaguely described powers to exercise executive and administrative authority. At the same time, however, the Act prescribes that the chairman shall be governed by the policy of the Commission and gives the commissioners as a whole approval authority over appointments to the major staff offices and formulation of the agency's budget.

Below the Commission there is no general manager or chief executive officer with singular authority over the staff. The staff is divided into four major offices, each of which is headed by an office director. Between the office directors and the Commission is an Executive Director for Operations (EDO). According to NRC regulations, the EDO is authorized to "discharge the operational and administrative functions of the Commission" and to "perform such functions as the Commission may direct." But the statute itself limits the EDO's power to restrict the office directors beneath him, each of whom can by law report directly to the Commission rather than to him. Indeed, until

1978, the office directors were able to bypass the EDO altogether; a statutory amendment that year required them at least to keep the EDO informed of their communications with the commissioners. The EDO served primarily as a conduit between the five equally powerful commissioners above him, and the five office directors, each with his own independent jurisdiction, below. The result was variously described as "nonmanagement," a "mess," and a situation where "nobody is running the store." As for the staff offices, they have been characterized as "feudal" baronies and "independent fiefdoms."

It was not uncommon at public meetings of the Commission to see a majority of the senior staff of the agency -- office directors, their deputies and their senior technical experts -- filling the front rows of the meeting room (after nearly an hour trip to downtown Washington from Maryland) waiting in case a commissioner should raise a question about a particular staff office's "position" on some question. This practice demonstrated a complete lack of coordination of the agency's resources and a tremendous waste of time for the staff and for the Commission.

One industry manager analogized the NRC's conduct of its business to the play of an amateur soccer team: "Everybody runs to where the ball is."

Not surprisingly, this organizational mess resulted in the failure of the NRC to fulfill its basic purposes. The Commission neither managed its own staff well, nor provided effective leadership on issues of nuclear safety. Indeed, the Commission spent most of its time on administrative chores, personnel or budgetary matters, specific, isolated safety matters, and such issues as export licensing. It spent little of its time deliberating or deciding any of the broad or important issues relating to reactor safety.

Most of these revelations about the NRC came to light in the aftermath of Three Mile Island, as the Kemeny Commission and our Special Inquiry both recommended its abolition. Instead, in 1980, the Commission underwent a very modest reorganization, to strengthen the authority of the Chairman and the EDO, and to clarify the role of the commissioners. At least the Chairman was given clear control over emergencies, so that a majority vote would not be needed in a crisis! But despite a somewhat clearer chain of command, the advantages of the collegial commission continue to exist only in theory. The Chairman is still unable to control the Commission's agenda; its position is practically unchanged from before the reorganization.

Most of the Special Inquiry's recommended changes in organization, licensing, design, training, siting, evacuation planning and oversight lie dormant today, five and one-half years later. Since 1980, there has been continued talk about changing the NRC's structure and regulatory program. The changes have been painfully slow. Symbolic of this pace, five and one-half years later, the Commissioners are still housed in downtown Washington, while their staff is scattered in Bethesda. Five and one-half years later, issues such as standardization of licensing become moot because in an atmosphere of regulartory uncertainty, no new plants are planned. As we predicted in 1980, the NRC has not provided leadership in reforming its own regulatory scheme or industry practices. It has not regained the trust of the American people; nor has it helped the nuclear industry regain that trust. And both the NRC and the industry must realize that without at least some public consensus that nuclear power is safe, further development, timely, economical completion of projects, and efficient operation of existing plants will all be very difficult.

REORGANIZATION TO A SINGLE ADMINISTRATOR AGENCY

The central and overwhelming need is for legislative and executive reorganization to establish a single chief executive with the clear authority to supervise and direct the entire NRC staff.1/ An effective reactor safety program absolutely requires strong and effective management of this kind.

The NRC is virtually the only agency in the Federal Government charged with protecting public health and safety that is headed by a commission. Regulatory commissions auch as the Federal Communications Commission, the Interstate Commerce Commission, and the Securities and Exchange Commission basically regu-

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1/ While I believe that the Commission has attracted highly qualified members, some suggest that the single administrator position would make it possible to attract a more powerful, politically visible administrator who would not only administer the NRC effectively, but would be able to advocate their positions before Congress and other agencies.

late economic behavior, not safety. For the most part, the protection of the public safety and health has been committed to single-administrator agencies: the Food and Drug Administration, the Environmental Protection Agency, the Occupational Safety and Health Administration, and the Mine Safety and Health Administration. Indeed, considering the old AEC's lack of interest in regulation, the management of reactor safety was for all practical purposes a single-administrator agency within the AEC until 1975.[2]

Two main arguments have been advanced for retaining the Commission: (1) that the commission form enhances public visibility of the policy-making process; and (2) that because public opinion about nuclear power is divided and uncertain, and because quantitative assessment of its risks is imperfect, the Commission helps ensure that a diversity of views will be represented in that policy-making process. Along with these arguments is another, perhaps stronger concern that apparently prompts some members of Congress and anti-nuclear critics to be suspicious of the single administrator proposal. They fear that if the single administrator were "pro-nuclear," he might ride roughshod over legitimate concerns about safety. Some legislators may also be concerned that the effectiveness of congressional oversight of a single

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2/ In 1962, the AEC recommended its own abolition and replacement with a single administrator because the commission form "diffused responsibility and slowed down the decisional process."

administrator directly responsible to the executive branch would be reduced.

We do not believe any of these considerations is a valid reason for retention of the present commission structure. With respect to public visibility of the licensing process, the present Commission does not involve itself in that process anyway, and under a single administrator the independent Licensing and Appeal Boards would be retained.

The rulemaking and policy making proceedings in which the Commission engages would be conducted in front of a single administrator in the same public, on-the-record fashion. Realistically, the opportunity for public scrutiny of the policy-making process depends not on whether there is a single administrator or five commissioners, but on the effectiveness of the avenues available for public participation. Most issues important to safety will be pursued not by the general public but by intervenor, public interest and scientific groups. In our report, we proposed a series of steps (including more deliberate, open policy-making at the top level of the agency; intervenor funding; and establishment of an Office of Public Counsel) that would altogether increase public visibility of and participation in the policy-making process far above what it is today, even if the agency were run by a single administrator.

There is not an agency in Government that would not better provide for a "diversity of views" if it were headed by a commission. It is not likely, however, that any of these agencies would be as well managed. As the NRC's own history of nonmanagement and lack of leadership amply demonstrates, reflection of diverse views must be weighed against effective management, which in this case means effective management of a coordinated safety program.

The disadvantages of the commission form have been pointed out again and again over the past two decades by various prestigious study groups. For example, the President's Council on Executive Organization, which involved a study of a number of independent Federal regulatory commissions culminating in the so-called "Ash Report" in 1971, made a number of observations about the weaknesses of the commission structure in general. The Council concluded that collegial bodies are inefficient mechanisms for formulating and implementing policy in a timely manner; they tend to disagree on major policy issues and therefore wait for individual cases in which to decide such issues; they fail to coordinate policy with other agencies; they tend to concentrate on details and create backlogs in dealing with important issues; they do not adapt easily to new technology and industry innovations; they create a legalistic environment that contributes to a passive, overly judicial approach to regulation; they allocate resources poorly within their own agencies; and, ironically, they tend to defeat the political accountability required for public responsibility.

The desire for "diversity" in part mistakes what I believe to be the proper roles for the regulatory agency, the Executive and

Congress in our nuclear safety program. The proper function of the Commission or administrator should not be to consider and resolve competing public attitudes about nuclear power in every individual safety decision that is made. It is precisely this hidden pressure that has played an important role in paralyzing the Commission in the past. Decisions about the ultimate safety objective in the regulatory program, and about the expansion or reduction of our country's reliance on nuclear power -- decisions which inevitably involve a balancing of the risks against the benefits of this technology -- should be made by the Executive and Congress, as a part of the Nation's overall strategic energy policy. The role of the Commission or administrator should be to formulate such a standard in the first instance for review and approval by the President and Congress, and then when a standard is approved to apply it.

Finally, I do not believe that the expression of an appropriate diversity of viewpoints would be hampered by abolishing the Commission. Such diversity should be expressed in Congress, in both its legislative and oversight capacities. And we recommended the establishment of a Nuclear Safety Board, which would independently assess the NRC's overall reactor safety programs, and receive complaints and technical dissents from NRC decisions.

The fears of those who worry that the regulatory body might be put into the hands of a single administrator who is not sufficiently concerned about safety will be vitiated, in our view, by congressional confirmation and oversight authority, by establishment of the proposed Nuclear Safety Board, and by increased accountability of the administrator in the political process. In the recent past, Congress has proven its ability to control a "maverick" administrator who pursues a personal agenda.

In the final analysis, we found that the greatest single improvements in nuclear safety can be made by better management of the NRC's regulatory program and by increased requirements for onsite supervisory technical expertise at nuclear powerplants. Both will require an overhaul of the NRC's structure and management. Mounting an affirmative, comprehensive safety program is not a task that requires diversity of opinion. It is a task that absolutely requires strong central management controls and unified policymaking.

S. 2291, ESTABLISHMENT OF AN INDEPENDENT NUCLEAR SAFETY BOARD

Six years ago, our Special Inquiry commented on the need to establish an independent nuclear safety board. Unfortunately, over the passing years the problems which previously existed have not lessened. What we had to say then is no less relevant today.

The substance of the agency's licensing and regulatory functions is carried out almost exclusively by a technical staff trained in the various engineering and scientific disciplines relevant to nuclear power reactors. These individuals are the ones who review license applications, establish safety requirements and recommendations, conduct inspections, take enforcement actions, develop standards, and administer research programs.

The safety recommendations and analyses that come from these sources shape and, realistically, control most licensing and regulatory actions. The staff is where the safety die is cast.

We have found that there is really no existing organization within the agency that has either the responsibility for or the capability of monitoring the effectiveness of the regulatory staff and of making recommendations for actions needed to establish and maintain a safety review process of the requisite level of quality. It is a paradox that while the agency has long insisted on quality assurance progorams from industry entities associated with nuclear powerplants, it has never imposed a similar requirement for its own regulatory staff or for the safety review and inspection process. With the vast amount of unsupervised discretion that exists in the process, it is not surprising that senior managers readily accept the status quo and that few, if any, have spoken out and demanded agencywide organizational reforms. The momentum for that must come from outside of the staff.

Moreover, we have been surprised to find that NRC management was not conversant with modern safety engineering and management techniques in use in other highly complex technologies, particularly those associated with aerospace and national defense programs. Both NASA and the Department of Defense have had affirmative safety programs for years, if not decades, in which accident prevention technology has been applied beyond safety merely being "everybody's job."

Similarly, in other fields project management on a system life cycle basis has been a way of life in directing development, testing, and operation of complex vehicles, facilities, and equipment. Yet relatively little of this systems management philosophy exists at the NRC. Instead, the NRC's role has been oriented more toward prescriptive licensing of a utility -- putting a "Good Housekeeping Seal of Approval" on a proposed product -- as distinguished from regulation which must include careful monitoring and control of hazards during the entire life of a facility.

We believe there is a clear and pressing need for an organizational entity within the agency to be responsible for observing, evaluating, and making recommendations to improve the quality of the overall performance of the regulatory staff. This need can best be satisfied by the establishment of an independent Nuclear Safety Board. This Board would be outside of and independent of all other offices in the agency. The Board should be composed of a number of persons who are trained in technical disciplines associated with nuclear safety and radiation protection and who are thoroughly experienced with the licensing and regulatory process. The Board would be provided with a technical staff appropriate to its functions, and with necessary support personnel. It would not duplicate the functions of any office or provide another layer in the review process, but would instead:

- Exercise oversight on the effectiveness of the licensing review process and the regulation of existing plants.
- Advise the administrator on regulatory goals and important issues for rulemaking.
- Act as an ombudsman group to receive complaints and technical dissents.
- Enhance reactor safety by monitoring the effectiveness of the Office for Analysis and Evaluation of Operational Data's review of operating experience and of all other operational feedback.
- Monitor the staff's use of the latest analytical and design tools, and ensure that modern safety technology is applied throughout the agency's activities.
- Develop and maintain a capacity to investigate accidents and important safety related incidents, independent of all other offices of the NRC and the Commission or administrator.

The independent Board we envision has an analog in the National Transportation Safety Board (NTSB), which investigates aviation accidents independent of the FAA. But we envision a much larger role for the Nuclear Safety Board in providing a quality assurance function for the agency's regulatory process as a whole.

Some thought will have to be devoted to the relationship between this proposed new Board and the existing statutorily prescribed Advisory Comittee on Reactor Safeguards (ACRS). As discussed later in this report, we believe the ACRS has a distinct role to play in the regulatory process and that that role should be strengthened. However, the ACRS is composed of part-time members expert primarily in technical fields relating to reactor safety; we do not believe that the ACRS as presently constituted can perform the broader functions of the proposed Nuclear Safety Board.

We suggest that the Nuclear Safety Board might be composed of five full-time members who would also be members of the ACRS. Thus the ACRS would be composed of ten part-time members and five full-time members; the latter would vote as ACRS members and licensing proceedings and would also serve as full-time Nuclear Safety Board members. Our recommendation that additional staff be provided to the ACRS could then be met by having the Nuclear Safety Board's staff provide support for the ACRS as well as for the Board.

S. 2471, ESTABLISHMENT OF AN OFFICE OF INSPECTOR GENERAL IN THE NUCLEAR REGULATORY COMMISSION

In addition to an independent nuclear safety board, an equally independent office of Inspector General should be established. In the past ten years we have seen the distinct advantages of having Inspectors General in government agencies. The NRC should not be denied the benefits that flow from such independent offices.

Our Special Inquiry indicates that until March 28, 1979, planning for evacuation around nuclear power plans by Federal, State and local authorities was uneven, at best. The NRC itself did little to encourage such planning, in large part because of a prevailing attitude that a serious accident with releases beyond containment simply would not happen. The NRC has required utility company licensees to plan only for protective measures within the low population zone, and to show that they have their own emergency plans which include notification to and coordination with local and State authorities. The existence of an effective State emergency or evacuation plan in case of an accident had not been a condition for granting a reactor operating license.

The President's Commission recommended that Federal emergency planning functions for accidents at nuclear reactors should be consolidated into a single Federal agency. Our Special Inquiry Group agreed. The Federal Emergency Management Aency ("FEMA"), rather than the NRC or the Department of Energy, appeared to be the appropriate agency for such planning. FEMA's principal mission is to help States plan for the logistics and communications involved in protective action, including evacuation, made necessary by any one of a variety of natural disasters or accidents.

Because we believe that protective action -- ranging from staying indoors to partial evacuation to general evacuation -- must be considered an independent form of safeguard, we believe that workable evacuation plans are a prerequisite to continued operation of existing and future reactors. Once criteria has been established to define the level of risk, each site can then be examined to develop a minimum evacuation planning zone, within which evacuation must be capable of being carried out in a safe fashion within the prescribed time period to protect those threatened by a serious accident in a nearby plant.

S. 2471, the establishment of an office of Inspector General in the Nuclear Regulatory Commission, addresses this issue. Since the bill permits the Inspector General to review standards and procedures regarding nuclear safety procedures, propose regulations and report to Congress, public safety will be facilitated. I also believe the expanded duties for the Inspector General of FEMA relating to the annual testing of evacuation plans and the certification of nuclear facilities is imperative to assure the safety of individuals living in proximity to nuclear facilities.

Moreover, I believe provisions must be included to broaden the scope of the Office of Inspector General. Under the present NRC structure, the situation is ripe for deficiencies in the nuclear industry and Commission to go undetected or without remedy. Indeed, this situation neither promotes efficiency nor ensures safe operations, and as a result it is necessary to provide the necessary police measures. This is possible through the expansion of the Inspector General's domain to include powers such as the ability: (1) to ensure that the Commission enforces its regulations, (2) to propose legislation, and (3) to conduct and initiate investigations, and (4) to subpoena all information. I therefore urge support for S. 2471 in addition to those measures which broaden the scope of the Office of Inspector General.

CONCLUSION

With every passing year, TMI recedes in our memory. Just as Brown's Ferry Fire slipped beneath the surface of daily concerns years ago, TMI has joined it in the past seven years. It takes dogged perseverance in the nuclear industry and Government to truly follow through with the lessons learned from TMI. I firmly believe that all three bills respond to problems perceived during our Special Inquiry. In conclusion, for nuclear power to remain a viable source of energy in the United States, measures such as these which promote the enforcement of NRC regulations, NRC efficiency, and public safety must be supported to ensure competent and informed regulation of nuclear facilities.

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July 31, 1986

The Honorable Alan K. Simpson
Chairman
Subcommittee on Nuclear Regulation
Unites States Senate
Washington, D.C. 20510

Dear Alan:

I have set forth below my responses to the nine (9) additional questions posed in your letter of June 30th in relation to my testimony before the Subcommittee.

1. TO WHAT EXTENT DO YOU VIEW "COLLEGIAL INTERACTION" AS AN ADVANTAGE OF THE COMMISSION STRUCTURE, AND HOW MUCH "COLLEGIAL" FORMULATION OF POLICY -- WITH ALL FIVE COMMISSIONERS PRESENT -- DO YOU THINK ACTUALLY TAKES PLACE AT THE COMMISSION?

Collegial interaction is not an advantage of the NRC structure. The President's Council on Executive Organization, which involved a study of a number of independent Federal regulatory commissions culminating in the so-called "Ash Report" in 1971, made a number of observations about the weaknesses of the commission structure in general which I believe can also be made with respect to the NRC. The Council concluded that collegial bodies are inefficient mechanisms for formulating and implementing policy in a timely manner; they tend to disagree on major policy issues and therefore wait for individual cases in which to decide such issues; they fail to coordinate policy with other agencies; they tend to concentrate on details and create a legalistic environment that contributes to a passive, overly judicial approach to regulation; they allocate resources poorly within their own agencies; and, ironically, they tend to defeat the political accountability required for public responsibility.

2. DO YOU THINK THAT THE DIVERSITY OF VIEWS THAT ARE BROUGHT TO BEAR ON ANY GIVEN ISSUE AT THE COMMISSION, AS A RESULT OF HAVING FIVE COMMISSIONERS, IS ANY GREATER THAN THE RANGE OF VIEWS THAT THE ADMINISTRATOR OF EPA OR FDA OR THE FAA HAS, WHEN HE MAKES A DECISION, AS A RESULT OF THE INTERACTION OF THOSE ADMINISTRATORS WITH THEIR STAFFS AND WITH THE PUBLIC?

The desire for diversity in part mistakes what I believe to be the proper rules for the regulatory agency, the executive and Congress in our nuclear safety program. The proper function of the Commission or administrator should not be to consider and resolve competing public attitudes about nuclear power in every individual safety decision that is made. It is precisely this hidden pressure that has played an important role in paralyzing the Commission in the past. The role of the Commission or administrator should be to formulate such a standard in the first instance for review and approval by the President and Congress, and then when a standard is approved to apply it. Furthermore, the NRC's historical lack of management demonstrates that the only assured result of the diverse views of a commission is ineffective management.

3. DOES THE COMMISSION HAVE A BROADER PERSPECTIVE THAN OTHER HEALTH AND SAFETY AGENCIES, SIMPLY BECAUSE IT HAS MORE MEMBERS?

The Commission does not have a broader perspective than other health and safety agencies simply because it has more members. An appropriate expression in this instance is that "more is not necessarily better." A single administrator would continue to receive information from all channels yet the organization is streamlined to promote better management and nuclear safety.

4. DO YOU THINK THAT THESE OTHER EXECUTIVE BRANCH AGENCIES, WHICH ARE HEADED BY A SINGLE ADMINISTRATOR, CARRY OUT THEIR STATUTORY RESPONSIBILITIES TO PROTECT THE PUBLIC HEALTH AND SAFETY IN ANY MORE OR LESS EFFECTIVE MANNER THAN THE COMMISSION?

Single administrator agencies carry out their statutory responsibilities more effectively than the commission. For instance, the NRC is virtually the only agency in the federal government charged with protecting public health and safety that is headed by a commission. Single administrator agencies are more efficient and therefore more capable of managing comprehensive national safety programs.

5. OPPONENTS OF THE SINGLE ADMINISTRATOR IDEA HAVE ARGUED THAT, WITH THE CHANGE IN ADMINISTRATIONS, THE "POLITICS" OF THE AGENCY WILL SHIFT VIOLENTLY, AS DIFFERENT PRESIDENTS APPOINT ADMINISTRATORS WITH FUNDAMENTALLY DIFFERENT VIEWS ABOUT NUCLEAR POWER. YET, AS I LOOK AT THE OTHER HEALTH AND SAFETY AGENCIES IN THE EXECUTIVE BRANCH, THE HEADS OF THOSE AGENCIES HAVE, BY AND LARGE, COME FROM THE MAINSTREAM OF THE REGULATORY COMMUNITY. TO WHAT EXTENT IS THIS POTENTIAL FOR VIOLENT CHAGNES IN POLICY DIRECTION OF A REAL CONCERN?

In light of past experience with other health and safety agencies in the executive branch, the potential for violent changes in policy direction is not a real concern. In the past, Congress has proven its ability to control a "maverick" administrator who pursues a personal agenda. These fears are further vititated by congressional confirmation and oversight authority, by the establishment of the proposed Nuclear Safety Board, and by increased accountability of the administrator in the political process.

6. ON THE QUESTION OF PUBLIC PARTICIPATION IN THE DECISIONMAKING PROCESS AND PUBLIC VISIBILITY OF THE ACTIONS OF THE COMMISSION, WOULD YOU PLEASE COMMENT ON WHETHER THE BROAD PUBLIC INTEREST IS BETTER SERVED BY THE EXISTING COLLEGIAL APPROACH OR BY A SINGLE ADMINISTRATOR?

The rulemaking and policy making proceedings in which the Commission engages would be conducted in front of a single administrator in the same public, on-the-record fashion. Realistically, the opportunity for public scrutiny of the policymaking process depends not on whether there is a single administrator of five commissioners, but on the effectiveness of the avenues available for public participation. In our Special Inquiry, we proposed a series of steps (including more deliberate, open policymaking at the top level of the agency; intervenor funding; and establishment of an Office of Public Counsel) that would increase public visability of and participation in the policymaking process far above what it is today, even if the agency were run by a single administrator.

7. IN MANY CASES, THE MATTERS OF GREATEST PUBLIC INTEREST ARE OFTEN THE LICENSING PROCEEDINGS FOR INDIVIDUAL REACTORS, WHERE THE LOCAL PUBLIC BECOMES ACTIVELY INVOLVED. IF WE ADOPT A SINGLE ADMINISTRATOR, SHOULD WE RETAIN THE BASIC ADJUDICATORY FRAMEWORK FOR THESE LICENSING PROCEEDINGS, AND IF WE DO, WHAT

SACRIFICE, IF ANY, ARE WE MAKING IN THE AMOUNT OF PUBLIC PARTICIPATIOIN IN THESE PROCEEDINGS?

If a single administrator agency is adopted, the licensing proceedings for individual reactors would remain the same. No change in this is envisioned and the opportunity for the public to be heard will be retained.

8. **IN 1980, REORGANIZATION PLAN NO. 1 OF 1980 WAS ISSUED BY THE CARTER ADMINISTRATION, IN RESPONSE TO THE CONCERNS RAISED BY THE POST-TMI INVESTIGATIONS. PLEASE COMMENT ON THE EXTENT TO WHICH THIS PLAN [SIC] BEEN EFFECTIVE IN ADDRESSING THE CONCERNS THAT KEMENY AND ROGOVIN RAISED?**

The 1980 Reorganization Plan No. 1 has not been effective in addressing concerns raised by our Special Inquiry and the Kemeny Commission. In 1980, the Commission underwent a very modest reorganization, to strengthen the authority of the Chairman and the EDO, and to clarify the role of the commissioners. The Chairman was given clear control over emergencies so that a majority vote would not be needed in a crisis. But despite a somewhat clearer chain of command, the advantages of the collegial commission continue to exist only in theory. The Chairman is still unable to control the Commission's agenda; its position is practically unchanged from before the reorganization.

9. **IN THE INTEREST OF BALANCING THE NEED FOR INDEPENDENT REGULATION AGAINST THE PROPOSAL TO REPLACE THE COMMISSION WITH AN INDEPENDENT SINGLE ADMINISTRATOR WITHIN THE EXECUTIVE BRANCH, PLEASE COMMENT ON THE MERITS OF A COMPREHENSIVE REGULATORY REFORM PACKAGE THAT WOULD INCLUDE -- (1) THE SINGLE ADMINISTRATOR PROPOSAL; (2) AN INSPECTOR GENERAL TO CARRY OUT THE FUNCTIONS OF THE NRC'S EXISTING OFFICE OF INSPECTOR AND AUDITOR; (3) A FACT-FINDING NUCLEAR SAFETY BOARD; AND (4) STANDARDIZATION LEGISLATION? WOULD AN APPROACH LIKE THIS CONTAIN THE ESSENTIAL ELEMENTS NECESSARY TO RESTORE CREDIBILITY AND EFFECTIVENESS TO NUCLEAR REGULATION, WHILE AT THE SAME TIME STRIKING THAT DELICATE BALANCE BETWEEN THE EXECUTIVE AND LEGISLATIVE BRANCHES?**

The three proposed bills in addition to the standardization of nuclear facilities are all meritorious concepts. It must be noted, however, that a comprehensive regulatory reform package may run the risk of defeat or alteration in a compromise. If this occurs, I strongly believe that the primary focus must be directed toward changing the NRC from a collegial body to a single administrator agency.

I believe your legislative solution of the problem is a very sensible one and hope to see it enacted in the near future. Good luck with it.

Cheers,

Mitch Rogovin

Mitchell Rogovin

Statement of Wallace B. Behnke
Vice Chairman
Commonwealth Edison Company

on

S.1235 - Nuclear Regulation Reorganization Act of 1985,
S.2291 - Nuclear Safety Board Act of 1986,
S.2471 - Improved Nuclear Standards Act

Before the
United States Senate
Subcommittee on Nuclear Regulation
Committee on Environment and Public Works

June 17, 1986

Mr. Chairman and Committee members, I am Wallace B. Behnke, Vice Chairman of Commonwealth Edison Company. Also, I am a member of the Board of Directors of the Atomic Industrial Forum and serve as the Chairman of the AIF Policy Committee on Nuclear Regulation. This statement is provided on behalf of the Atomic Industrial Forum, the Edison Electric Institute and the American Nuclear Energy Council.

Mr. Chairman, your personal effort on nuclear related issues, in particular with respect to nuclear regulation, is very much appreciated by the nuclear industry. We applaud your introduction of S.1235, the "Nuclear Regulation Reorganization Act of 1985", and your support of legislation to encourage plant standardization and licensing reform as major steps toward achieving stability and predictability in the nuclear licensing process.

Last summer, the Senate in a series of hearings reviewed the adequacy of electricity supply in the years ahead. Statements were presented by electric utility executives, several economists and others, all pointing to the need for action to assure that electricity will be available to fulfill the nation's needs over the long term. As stated then, we are on a collision course between growing demand and our ability to meet that demand. The only change in this regard over the past year is that we are one year further along the collision path.

Unfortunately, one important energy source has essentially been removed from our available options for the future; that of nuclear energy. Our assessment today has not changed from a year ago, when the Report of the Edison Electric Institute On Nuclear Power was published with the statement:

> "....under present regulatory and institutional arrangements, no American electric utility would consider ordering a new nuclear power plant."

A similar statement was in the 1984 Report of the Atomic Industrial Forum entitled Nuclear Power In America's Future:

> "Nuclear Power cannot at this time be considered a viable option on which to base new electric generating capacity in the U.S. If nuclear power is to compete for new electric generation, ways must be found to reduce the uncertainties and financial risks associated with capital-intensive and long lead-time construction."

These unfortunate indictments are thrust upon an energy form of vast potential that could serve the world's electricity needs for many centuries. Even though the technology to peacefully use the capability of atoms to fission, and release large amounts of energy, was invented in the United States and is now being used here, the option has been withdrawn from our future, for regulatory and institutional reasons. France, Japan, and West Germany, are industrial nations that continue to effectively call on nuclear energy, and they will secure an international competitive advantage by using this technology as the backbone of their electricity requirements.

We commend President Reagan and Secretary Herrington for their specific support for nuclear energy and their recognition of the need for an improved approach to licensing. The National Energy Policy Plan, prepared under the direction of Secretary Herrington, and recently transmitted to the Congress by President Reagan, is the national statement on energy and it includes important guidance for nuclear energy. The Plan includes the following statement:

> "...it makes the most sense at this time for the energy sector of the U.S. economy to emphasize coal, nuclear energy, and conservation wherever they are economical. Electricity, though not a source of primary energy itself, has been an important delivery mechanism through which to apply this 'triad'. It will continue to be so."

We concur fully with this quote. Coal is the primary fuel used to produce electricity, and it serves over fifty percent of the nation's demand. Nuclear energy has recently achieved the status of the second largest fuel source for electricity production, and it will grow to over twenty percent of the total demand as those plants still under construction are completed and brought on line.

This National Energy Policy Plan covers, in considerable detail, many actions that must be pursued to retain the health of the nation's energy supply. It recognizes the present licensing approach as a handicap to the use of nuclear energy and designates as one element of the strategy of the Administration:

> "To reform the process of plant licensing and regulation legislatively--encouraging standardized plant design and 'one stop' licensing that ensures safety and environmental protection with a minimum of litigious complication."

Our desires and efforts are in complete agreement with this element of the Administration's strategy. We urge Congress to join the Administration on this item, and we in turn will work with both of you to succeed in this area where we have fallen short with prior attempts.

How could we, the largest of industrial nations, lose this nuclear energy option while others are able to capitalize on its advantages? While the answer is complex, including electric utility industry inattention to some important details during our early application of the technology, several specific actions must be taken to regain the advantages offered with nuclear energy. We, the utility industry, have taken important steps to further the safety of plant operations. Our setting of "benchmarks of excellence" through the efforts of the Institute of Nuclear Power Operations, and the establishment of the National Academy for Nuclear Training are specific industry actions of significant value. We will continue to seek further improvements.

Still, we are faced with a major obstacle on the Federal front. The licensing and regulatory process is unpredictable and lacking in stability. The Nuclear Regulatory Commission repeatedly has been frustrated by its own organizational structure in its attempts to take timely action on important issues. Congress has the authority to rectify, to a large extent, this unsatisfactory situation. S.1235, the "Nuclear Regulation Reorganization Act of 1985" and S.2073/S.2373, the "Nuclear Facility Standardization Act of 1986", provide excellent vehicles for addressing our concerns with the NRC organizational structure and the licensing process.

Organizational Structure

The need for organizational restructuring of the Commission has been addressed a number of times by a diverse group of parties, with the first major attempt being made by the Kennedy Administration in 1960. Following the Three Mile Island accident in 1979, both the Kemeny Commission and the Rogovin Special Inquiry Group recommended that the NRC be restructured to an agency headed by a single administrator. Most recently, at an April 22, 1986 hearing of the Senate Energy and Natural Resources Committee, Secretary of Energy Herrington, NRC Chairman Palladino, NRC Commissioners Zech, Roberts and Bernthal, Sherwood Smith in representing EEI, AIF and ANEC, and every other nuclear industry witness testifying, all endorsed the single administrator concept for restructuring the NRC.

The nuclear industry recognizes that such a fundamental change to an agency requires extremely careful consideration. We have looked long and hard at the question of the most appropriate NRC management structure. In 1984 and 1985, a series of three reports were prepared for the Edison Electric Institute by Marcus A. Rowden, a former Chairman of the Nuclear Regulatory Commission. The first report examined the history of the NRC structure and the resulting managerial problems; the second report scrutinized the arguments supporting and opposing a Commission structure for NRC and the major management alternatives; and the third report analyzed the issues raised by any change from a Commission form of management to one of a single administrator. These reports, in our view, constitute valuable background material in considering the issues presented by S.1235. These reports have been combined into a single report, entitled A Report on the Management Structure of the Nuclear Regulatory Commission Prepared for the Edison Electric Institute, and with your permission I would like to submit this report for the record of this hearing.* While this report does not specifically recommend a preferred regulatory organizational structure, the single administrator structure appears to have many attractive features to achieve the stability and predictability desired for the regulator.

The report does show that the organizational structure of the Nuclear Regulatory Commission appears to have come about as a historical accident concurrent with the reassignment of Federal responsibilities from those held by the Atomic Energy Commission into two separate sets of responsibilities divided between the Nuclear Regulatory Commission and the Energy Research and Development Agency (subsequently made the Department of Energy). When the Nuclear Regulatory Commission was created in 1975, to specifically address the Federal safety regulatory aspects of civilian nuclear energy, President Gerald Ford observed that "[t]he highly technical nature of our nuclear facilities and the special potential hazards which are involved in the use of nuclear fuels warrant the creation of an independent and technically competent regulatory agency to assure adequate protection of public health and safety". However, little attention was directed to define the proper organizational form to manage a comprehensive nuclear safety program.

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*Retained in committee files.

An irony of the establishment of the Commission in 1975 is that the perceived driving need, to assure regulatory control of a rapidly growing commitment to the use of nuclear energy, did not actually come about. In fact, new commitments for nuclear energy plants essentially stopped about the time the Commission was formed. Every civilian nuclear energy plant ordered after the Commission was established has been either cancelled or placed on indefinite deferral. While many factors contributed to this dropoff in commitments to nuclear energy, the organizational structure of the Commission is viewed as one contributor to the unpredictability and lack of stability in the Federal safety licensing process. Without predictability and stability, the nation's utilities are unable and unwilling to call on new nuclear energy plants to fill the energy needs of a growing economy.

It is worth recalling that when the Energy Reorganization Act was adopted in 1974, there was no real examination of the appropriateness of collegial management for safety regulation; and no consideration was given to the fact that all other major federal health and safety programs had been managed by agencies headed by a single administrator, with collegial management of federal agencies largely confined to rate making and other economic areas.

Advantages of a Single Administrator

We believe the single administrator form of regulatory management offers several distinct advantages over the current commission structure.

1. Improved Management. One of the principal findings of the cited post-TMI studies was that, as a result of the agency's collegial management, the NRC was "an organization that is not so much badly managed as it is not managed at all." Replacing the five-member commission with a single administrator, most observers agree, would significantly improve the management of the agency. A single administrator, who alone would possess full responsibility and authority for efficient agency operation, would be able to manage the agency more effectively than a commission, in which authority and responsibility are diffused.

2. Improved Policy Formulation. A second major criticism made by the post-TMI studies was that the NRC had failed to control regulatory policymaking. Faced with the institutional and inter-personal obstacles inherent in arriving at consensus positions, the Commission has, in too many cases, let its policymaking responsibilities fall by default to its regulatory staff and to case-by-case decisionmaking by its licensing boards. A 1980 report by the General Accounting Office found that "[d]espite the importance of policymaking to nuclear regulation, the Commissioners have generally left to the NRC staff decisions on when new policies are needed, which new policy requirements should receive policy attention and how policies should be written." While the composition of the Commission at any given

time may make these tendencies more or less acute, the problem is primarily inherent in the Commisssion form of management, as the post-TMI studies of NRC perceptively noted. The problem, moreover, has been exacerbated by the constraints imposed by the Government in the Sunshine Act which imposes significant limitations on the ability of members of collegial bodies to interact effectively in reaching consensus determinations.

3. Clear Accountability. A third major deficiency of the current NRC structure is that, by diffusing responsibility it diffuses accountability. As contrasted to the current situation where no one individual is in charge at NRC, a single administrator -- and the President who appoints that official -- would be fixed with unmistakable accountability for agency performance. Governmental experience teaches that political accountability is a powerful safeguard of the public interest.

Opposing Arguments

Two major criticisms have been leveled at the single administrator approach to NRC management -- loss of diversity in agency decisionmaking, and lessened public visibility of the regulatory process. There are persuasive responses to each of those criticisms.

1. Divergent Views. The major argument in favor of "diversity" is that the controversial nature of nuclear issues warrants a collegial body to reflect disparate viewpoints. The Rogovin report contains an effective reply to that argument:

> "The desire for 'diversity' in part mistakes what we believe to be the proper roles for the regulatory agency, the Executive and Congress in our nuclear safety program. We do not believe the

> proper function of the Commission or administrator should be to consider and resolve competing public attitudes about nuclear power in every individual safety decision that is made. It is precisely this hidden pressure that has played an important role in paralyzing the Commission in the past few years. Decisions about the ultimate safety objective in the regulatory program, and about the expansion or reduction of our country's reliance on nuclear power -- decisions which inevitably involve a balancing of the risks against the benefits of this technology -- should ultimately be made by the Executive and the Congress, as part of the Nation's overall strategic energy policy."

2. Public Visibility. It also has been argued that a single administrator would reduce the public visibility of the policy making process. A single administrator, clearly, would not be subject to the strictures of the Sunshine Act. We hardly think this decisive, however, in terms of the openness of the regulatory process. NRC rulemaking would continue to be conducted under the public notice and comment procedures mandated by the Administrative Procedure Act. Moreover the licensing and regulatory process, as a whole, would still be as open as it is today to public scrutiny. Licensing issues would continue to be aired in public hearings; technical issues would continue to be ventilated in public meetings of the staff and of the Advisory Committee on Reactor Safeguards; the agency's practice of making virtually all of its papers publically available would still continue; and, of course, the Freedom of Information Act would continue to apply. We would fully expect, furthermore, that Congressional oversight would continue to be vigorous and ongoing. In short, the nuclear regulatory process would remain the most open and visible public process pursuant to which the government's business is conducted.

S.2291 - Nuclear Safety Board Act of 1986

A completely independent Nuclear Safety Board is called for by S.2291, providing a broad mandate to investigate events, review regulatory activities and recommend improvements in licensing and regulatory practices. As proposed, the functions of this proposed Board would duplicate functions performed by the Commission staff and would create yet another layer of regulation. A fundamental regulatory principle is that excessive layers of review and inspection do not ensure safety and indeed can detract from safety by diluting the sense of responsibility.

While some form of a Nuclear Safety Board may be appropriate in conjunction with a Single Administrator form of regulatory organization, the Board proposed in S.2291 appears to be inappropriate because of its duplicative regulatory functions.

S.2471 - Improved Nuclear Standards Act

An Office of Inspector General in the NRC would be established with S.2471. To the extent that creation of such an office would be consistent with the Inspector General Act of 1978, responsible for the functions of investigating possible waste, fraud and abuse within an agency, the merits of such a proposal should be addressed by the NRC rather than by the nuclear industry. However, the Special Provisions proposed in S.2471 appear to present a significant departure from the conventional role of an Inspector General. These provisions appear to establish yet another layer of regulation. Such a role is inappropriate for an Office of Inspector General.

Standard Plant Design

Another step that we believe will be essential to permit utilities to consider future nuclear power plant commitments is the use of standard plant designs. These designs must be pre-approved by the NRC. Assurance must be given that, when a plant is ordered, the regulatory process will permit it to be built, and permission to operate the plant will not be withheld once all pre-approved conditions are satisfied. Congressional direction is essential for the concept of pre-approved standard designs to be realized in conjunction with the issuing of a single-step license to construct and operate a nuclear power plant.

A recently completed Position Paper on Standardization, prepared by the AIF Study Group on the Practical Application of Standardized Nuclear Power Plants in the United States, goes a long way in defining what is meant by nuclear plant standardization and how the concept would be implemented. This Position Paper describes policies and actions that, if implemented by the Nuclear Regulatory Commission, are expected to encourage and support the development of standard nuclear power plants in the United States. Congressional passage of S.2073/S.2373, the "Nuclear Facility Standardization Act of 1986", is needed to cause these actions to occur.

Another significant factor is that several associations, representing large consumers of electricity, strongly support nuclear licensing reform legislation. These include the United States Chamber of Commerce, the National Association of Manufacturers, and the Electricity Consumers Resource Council. They, as consumers, realize that the revitalization of the nuclear energy option increases their chances of obtaining reliable and economical electricity over the long term. Additionally, action on this is supported by the Building and Trades Department of the AFL-CIO, the American Public Power Association and the National Rural Electric Cooperative Association. Also, I bring to your attention the lead sentence of the editorial Nuclear's Charm, in The Economist of March 29, 1986, as follows:

> "Only by investing heavily in nuclear power today can the world be sure of avoiding high-cost energy in the 1990s and beyond."

Mr. Chairman, earlier this year a major milestone was reached with the licensing of the 100th nuclear power plant. Ninety-three of these nuclear energy power plant have achieved commercial operation, and more electricity was produced by them during 1985 than from all fuel forms combined in 1950. We are committed to operate these plants safely and efficiently.

Major strides have been made in bringing this technology to an advanced state. However, we have lost the ability to make future commitments for its use. This must be changed. And we are here today to urge you to take the important step of reporting out S. 1235, the "Nuclear Regulation Reorganization Act of 1985," and S.2073/S.2373, the "Nuclear Facility Standardization Act of 1986," and to urge their passage by the full Senate of the United States. Please, we ask for your action now, before we have lost the future value of this technology.

Thank you for this opportunity to present the views of the nuclear industry, and I must emphasize that the total nuclear industry supports this action. I will be pleased to answer your questions.

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II

99TH CONGRESS
1ST SESSION

S. 1235

To reorganize the functions of the Nuclear Regulatory Commission by abolishing the Commission and, in its place, establishing the Nuclear Regulation Agency, in order to promote more effective and efficient nuclear licensing and regulation.

IN THE SENATE OF THE UNITED STATES

JUNE 4 (legislative day, JUNE 3), 1985

Mr. SIMPSON (for himself and Mr. SPECTER) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To reorganize the functions of the Nuclear Regulatory Commission by abolishing the Commission and, in its place, establishing the Nuclear Regulation Agency, in order to promote more effective and efficient nuclear licensing and regulation.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION 1. This Act may be cited as the "Nuclear Regulation Reorganization Act of 1985".

DECLARATION OF PURPOSES

SEC. 2. The Congress declares that—

(1) a clear and coordinated national policy for the development, use, and regulation of atomic energy for peaceful purposes, in accordance with the objectives of the Atomic Energy Act of 1954, as amended, is in the best interest of the general welfare and the common defense and security of this Nation; and

(2) to best achieve these objectives, improvements in the effectiveness and efficiency of the current approach to the licensing and regulation of atomic energy for peaceful purposes are required.

DEFINITIONS

SEC. 3. For the purposes of this Act—

(1) the term "Agency" means the Nuclear Regulation Agency established under section 4; and

(2) the term "Director" means the Director of the Nuclear Regulation Agency appointed under section 5(a).

ESTABLISHMENT OF NUCLEAR REGULATION AGENCY

SEC. 4. (a) There is established as an independent regulatory agency of the Government the Nuclear Regulation Agency (hereinafter in this Act referred to as the "Agency"). The Agency shall succeed the Nuclear Regulatory Commission in existence on the day before the effective date of this Act.

(b) For purposes of chapter 9 of such title, the Agency is an independent regulatory agency.

OFFICERS

SEC. 5. (a) The Agency shall be administered by a Director, who shall be appointed by the President, by and with the advice and consent of the Senate. The Director shall carry out all functions transferred to the Agency by this Act and shall have authority and control over all personnel, programs, and activities of the Agency.

(b) There shall be in the Agency a Deputy Director, who shall be appointed by the President, by and with the advice and consent of the Senate. The Deputy Director shall perform such functions as the Director shall prescribe. The Deputy Director shall act for and perform the functions of the Director during the absence or disability of the Director, or in the event of a vacancy in the office of the Director.

(c) There shall be in the Agency not to exceed four Assistant Directors, one each for nuclear reactor regulation, inspection and enforcement, nuclear material safety, and research, who shall be appointed by the President, by and with the advice and consent of the Senate. The Assistant Directors shall perform such functions as the Director shall prescribe. The Director shall designate the order in which the Assistant Directors shall act for and perform the functions of the Director during the absence or disability of the Director or the Deputy Director, or in the event of vacancies in all of those offices.

(d)(1) Section 5313 of title 5, United States Code, is amended by adding at the end thereof the following:

"Director, Nuclear Regulation Agency.".

(2) Section 5314 of title 5, United States Code, is amended by adding at the end thereof the following:

"Deputy Director, Nuclear Regulation Agency.".

(3) Section 5316 of title 5, United States Code, is amended by adding at the end thereof the following:

"Assistant Administrators, Nuclear Regulation Agency.".

ABOLITION OF NUCLEAR REGULATORY COMMISSION

SEC. 6. The Nuclear Regulatory Commission is hereby abolished. Sections 201, 203, 204, 205, and 209 of the Energy Reorganization Act of 1974, as amended, are repealed.

TRANSFER AND ALLOCATION OF APPROPRIATIONS AND PERSONNEL

SEC. 7. The personnel employed and the assets, liabilities, contracts, property, records, and unexpended balances of appropriations, authorizations, allocations, and other funds employed, held, used, arising from, available, or to be made available, in connection with the Nuclear Regulatory Commission and the functions transferred under this Act, are, subject to section 1531 of title 31, United States Code, transferred to the Agency for appropriate allocation.

EFFECT ON PERSONNEL

SEC. 8. (a) The transfer of personnel pursuant to this Act shall not cause any such employee to be separated or reduced in grade or compensation for one year after the date of such transfer.

(b) Any person who, on the day before the effective date of this Act, held a position compensated in accordance with the Executive Schedule prescribed in chapter 53 of title 5, United States Code, and who, without a break in service, is appointed in the Agency to a position having duties comparable to those performed immediately preceding his appointment, shall continue to be compensated in his new position at not less than the rate provided for his previous position for the duration of his service in his new position.

INCIDENTAL TRANSFERS

SEC. 9. (a) The Director of the Office of Management and Budget, at such time or times as the Director shall provide, may make such determinations as may be necessary with regard to the transfer of the Nuclear Regulatory Commission pursuant to this Act and the transfer of functions under this Act, and to make such additional incidental dispositions of personnel, assets, liabilities, grants, contracts, property, records, and unexpended balances of appropriation, authorizations, allocations, and other funds held, used, arising from, available to, or to be made available in connection with the Nuclear Regulatory Commission and the functions transferred under this Act, as may be necessary to carry out the provisions of this Act. The Director of the Office of Management and Budget shall provide for such further measures and dispositions as may be necessary to effectuate the purposes of this Act.

(b) After consultation with the Director of the Office of Personnel Management, the Director of the Office of Management and Budget is authorized, at such time as the Director of the Office of Management and Budget provides, to make such determination as may be necessary with regard to the transfer of positions within the Senior Executive Service in connection with the transfer of the Nuclear Regulatory Commission pursuant to this Act and the transfer of functions under this Act.

SAVINGS PROVISIONS

SEC. 10. (a) All orders, determinations, rules, regulations, permits, contracts, certificates, licenses, and privileges—

(1) which have been issued, made, granted, or allowed to become effective by the President, the Nuclear Regulatory Commission, or any court or competent jurisdiction, in the performance of functions which are transferred under this Act; and

(2) which are in effect at the time this Act takes effect,

shall continue in effect according to their terms until modified, terminated, superseded, set aside, or repealed by the President, the Director, a court of competent jurisdiction, or by operation of law.

(b)(1) The provisions of this Act shall not affect any proceedings pending at the time this Act takes effect before the Nuclear Regulatory Commission with respect to functions transferred under this Act; but such proceedings, to the extent that they relate to functions so transferred, may be continued before the Agency. Orders may be issued in such proceedings, appeals may be taken therefrom, and payments may be made pursuant to such orders, as if this Act had not been enacted; and orders issued in any such proceedings may continue in effect until modified, terminated, superseded, or repealed by the Administrator, by a court of competent jurisdiction, or by operation of law.

(2) The Director is authorized to promulgate regulations providing for the orderly transfer of proceedings continued under paragraph (1) of the Agency.

(c) Except as provided in subsection (e)—

(1) the provisions of this Act shall not affect actions commenced prior to the date this Act takes effect, and

(2) in all such actions proceedings shall be had, appeals taken, and judgments rendered, in the same manner and effect as if this Act had not been enacted.

(d) No action or other proceeding commenced by or against any officer in his official capacity as an officer of the Nuclear Regulatory Commission shall abate by reason of the enactment of this Act. No cause of action by or against the Nuclear Regulatory Commission or functions transferred under this Act, or by or against any officer thereof in his official capacity shall abate by reason of the enactment of this Act. Causes of action and actions or other proceedings with respect to any function transferred under this Act or with respect to the Nuclear Regulatory Commission, may be asserted by or against the United States or an official of the Agency, as may be appropriate, and, in an action pending when this Act takes effect, the court may at any time, on its own motion or that of any party, enter an order which will give effect to the provisions of this subsection.

(e) If, before the date on which this Act takes effect, the Nuclear Regulatory Commission, or any officer thereof in the official capacity of such officer, is a party to an action, and under this Act such action shall be continued with the Director or other appropriate official of the Agency, as the case may be, substituted or added as a party.

(f) Orders and actions of the Director in the exercise of the functions transferred under this Act shall be subject to judicial review to the same extent and in the same manner as if such orders and actions had been by the Nuclear Regulatory Commission in exercising such functions immediately preceding their transfer. Any statutory requirements relating to notice, hearings, actions upon the record, or administrative review that apply to any functions transferred under this Act shall apply to the exercise of such functions transferred under this Act shall apply to the exercise of such functions by the Director.

REFERENCE

SEC. 11. With respect to any function transferred under this Act and exercised after the effective date of this Act, any reference in any other law, or in any rule, regulation, certificate, directive, instruction, or other official paper in force on the effective date of this Act to the Nuclear Regulatory Commission shall be deemed to refer and apply to the Agency or the Director.

EFFECTIVE DATE

SEC. 12. This Act shall take effect one hundred and twenty days after the date of its enactment, or on such earlier date as the President may prescribe and publish in the Federal Register, except that any time on or after the date of enactment of this Act, any of the officers provided for in section 5 may be nominated and appointed, as provided in this

Act. Funds available to the Nuclear Regulatory Commission may, with the approval of the President, be used to pay the compensation and expenses of any officer appointed pursuant to this section and other transitional and planning expenses associated with the establishment of the Agency until such time as funds for such purposes are otherwise available.

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II

99TH CONGRESS
2D SESSION

S. 2291

To amend the Energy Reorganization Act of 1974 to create an independent Nuclear Safety Board.

IN THE SENATE OF THE UNITED STATES

APRIL 11 (legislative day, APRIL 8), 1986

Mr. BIDEN introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To amend the Energy Reorganization Act of 1974 to create an independent Nuclear Safety Board.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION 1. This Act may be cited as the "Nuclear Safety Board Act of 1986".

FINDINGS AND PURPOSE

SEC. 2. (a) The Congress finds that there is a great need for—

(1) vigorous investigation of events at facilities, or involving materials, licensed or otherwise regulated by the Nuclear Regulatory Commission; and

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(2) continual review and assessment of licensing and other regulatory practices of the Nuclear Regulatory Commission, which assessment may result in conclusions critical of the Nuclear Regulatory Commission or its officials.

(b) The purpose of this Act is to establish a Nuclear Safety Board which shall promote nuclear safety by conducting independent investigations of events at facilities, or involving materials, licensed or otherwise regulated by the Nuclear Regulatory Commission by reviewing and assessing the licensing and other regulatory practices of the Nuclear Regulatory Commission and by recommending to the Nuclear Regulatory Commission improvements in licensing and related regulatory practices.

ESTABLISHMENT OF NUCLEAR SAFETY BOARD

SEC. 3. Title II of the Energy Reorganization Act of 1974 (Public Law 93–438; 42 U.S.C. 5841 et seq.) is amended by adding at the end thereof the following new section:

"NUCLEAR SAFETY BOARD

"SEC. 212. (a) There is established a Nuclear Safety Board (hereafter in this section referred to as the 'Board').

"(b)(1) The Board shall be composed of 3 members appointed by the President, by and with the advice and consent of the Senate, from among persons who are not officers or employees of the Federal Government. No more than 2 members of the Board shall be of the same political party. Not later than 90 days after the date of the enactment of this section, the President shall submit such nominations for appointment to the Board.

"(2) Any vacancy in the membership of the Board shall be filled in the same manner in which the original appointment was made.

"(3) No member of the Board shall have any financial relationship (except ownership of small amounts of electric utility stock) with any business involved in the generation of nuclear power (including the provision of equipment or services therefor), or have such a relationship within the two years preceding and the two years following his appointment.

"(c)(1) The Chairman and Vice Chairman of the Board shall be designated by the President. The Chairman and Vice Chairman may be reappointed to such offices.

"(2) The Chairman shall be the chief executive officer of the Board and shall, subject to such policies as the Board may establish, exercise the functions of the Board with respect to—

"(A) the appointment and supervision of personnel employed by the Board;

"(B) the organization of any administrative units established by the Board; and

"(C) the use and expenditure of funds.

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The Chairman may delegate any of the functions under this subparagraph to any other member or to any appropriate employee or officer of the Board.

"(3) The Vice Chairman shall act as Chairman in the event of the absence or incapacity of the Chairman or in case of a vacancy in the office of Chairman.

"(d)(1) Except as provided under paragraph (2), the members of the Board shall serve for terms of 6 years. Members of the Board may be reappointed.

"(2) Of the members first appointed—

"(A) one shall be appointed for a term of 2 years;

"(B) one shall be appointed for a term of 4 years; and

"(C) one shall be appointed for a term of 6 years;

as designated by the President at the time of appointment.

"(3) Any member appointed to fill a vacancy occurring before the expiration of the term of office for which such member's predecessor was appointed shall be appointed only for the remainder of such term. A member may serve after the expiration of the member's term until a successor has taken office.

"(4) Any member of the Board may be removed by the President for inefficiency, neglect of duty, or malfeasance in office.

"(e) Two members of the Board shall constitute a quorum, but a lesser number may hold hearings.

"(f) The Board shall have the following functions and authorities:

"(1) The Board shall investigate those events at any facility, or involving any materials, licensed or otherwise regulated by the Nuclear Regulatory Commission, which the Board determines to be significant because of possible adverse effects on the health or safety of the public or because such events could be the precursors of events that may adversely affect the health or safety of the public. The Board may request the Nuclear Regulatory Commission to make investigations with regard to such events and to report its findings to the Board in a timely fashion. Whenever the Nuclear Regulatory Commission concludes such an investigation, the Board shall analyze the findings of the Commission for the purpose of making its own conclusions and recommendations. The purpose of any Board investigation under this paragraph shall be—

"(A) to ascertain information concerning the circumstances of the event involved, and its implications for the public health and safety;

"(B) to determine whether such event is part of a pattern of similar events at facilities, or involving any materials, licensed or otherwise regulated by the Nuclear Regulatory Commission which could adversely affect the public health or safety or which could be the precursor of events which could adversely affect the public health or safety; and

"(C) to provide such recommendations to the NRC for changes in licensing and other regulatory policy as may be prudent or necessary.

For purposes of this paragraph, the term 'event' shall include an action or failure to act by any person, including the Commission and its staff, or a continuing series of actions or failures to act by any such person, that the Board determines to have a potentially adverse affect on public health as provided in this paragraph.

"(2) The Board shall have access to and may systematically analyze operational data from any facility, or involving any materials, licensed or otherwise regulated by the Nuclear Regulatory Commission to determine whether there exist certain patterns of events that indicate safety problems.

"(3) The Board may conduct special studies pertaining to the nuclear safety at any facility, or involving any materials, licensed or otherwise regulated by the Nuclear Regulatory Commission.

"(4) The Board may evaluate suggestions received from the scientific and industrial communities, and from the interested public, on specific measures to improve safety at facilities, or involving materials, licensed or otherwise regulated by the Nuclear Regulatory Commission.

"(5) The Board shall recommend to the Nuclear Regulatory Commission those specific measures that should be adopted to minimize the likelihood that events will occur at any facility, or involving materials, licensed or otherwise regulated by the Nuclear Regulatory Commission which could adversely affect the public health or safety.

"(6) For purposes of investigations, the Board shall establish reporting requirements which shall be binding upon—

"(i) persons who operate, design, supply, maintain, or are otherwise involved with the operation or construction of, facilities licensed or otherwise regulated by the Nuclear Regulatory Commission; and "(ii) persons who process, store, transport, use, or possess materials licensed or otherwise regulated by the Nuclear Regulatory Commission.

"(B)(i) The information which the Board may require to be reported under this paragraph may include any materials designated as classified material pursuant to the Atomic Energy Act of 1954, or any materials designated as safeguards information and protected from disclosure under section 147 of the Atomic Energy Act of 1954.

"(ii) Information received by the Board shall be made available to the public in accordance with the applicable provisions of subsections (a) and (b) of section 306 of the Independent Safety Board Act of 1974 (49 U.S.C. 1905).

"(7) The Board shall issue periodic reports which shall be made available to the Congress, and to Federal, State, and local government agencies concerned with safety at facilities, or involving materials, licensed or otherwise regulated by the Nuclear Regulatory Commission. Upon request, such reports shall be made available to other interested persons. Such reports shall contain recommendations of specific measures to reduce the likelihood of occurrence of nuclear events similar to those investigated by the Board and of corrective steps to enhance or improve safety conditions at such facilities investigated by the Board and other facilities as considered appropriate by the Board.".

II

99TH CONGRESS
2D SESSION

S. 2471

To establish an Office of Inspector General in the Nuclear Regulatory Commission, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 20 (legislative day, MAY 19), 1986

Mr. D'AMATO introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To establish an Office of Inspector General in the Nuclear Regulatory Commission, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Improved Nuclear Standards Act".

ESTABLISHMENT OF AN OFFICE OF INSPECTOR GENERAL IN THE NUCLEAR REGULATORY COMMISSION

SEC. 2. (a) The Inspector General Act of 1978 is amended—

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(1) by inserting "the Nuclear Regulatory Commission," before "the Small Business Administration" in section 2(1);

(2) by redesignating subparagraphs (M) and (N) of section 9(a)(1) as subparagraphs (N) and (O), respectively;

(3) by inserting after subparagraph (L) of such section the following new subparagraph:

"(M) of the Nuclear Regulatory Commission, the offices of that agency referred to as the 'Office of Inspector and Auditor' and the 'Office of Investigations';";

(4) by striking out "or" after "Transportation" in section 11(1) and and inserting in lieu thereof a comma;

(5) by inserting "or the Chairman of the Nuclear Regulatory Commission," before "as the case" in such section;

(6) by inserting "the Nuclear Regulatory Commission," before " the Small Business Administration" in section 11(2); and

(7) by inserting after section 8A the following new section:

"SPECIAL PROVISIONS RELATING TO THE INSPECTOR GENERAL OF THE NUCLEAR REGULATORY COMMISSION

"SEC. 8B. (a) Each individual appointed to the position of Inspector General of the Nuclear Regulatory Commission shall, in addition to having the qualifications specified in the first section of 3(a), have expertise in nuclear safety.

"(b) The Inspector General of the Nuclear Regulatory Commission shall, in addition to the authority provided by the other provisions of this Act, have the authority and responsibility to—

"(1) review all nuclear safety procedures carried out by the Nuclear Regulatory Commission to ensure that the best available nuclear safety standards are used;

"(2) propose regulations to the Nuclear Regulatory Commission for the purpose of ensuring the public safety; and

"(3) prepare and transmit an annual report to the Congress concerning the adequacy of nuclear safety procedures used in the United States.".

ADDITIONAL DUTIES FOR THE INSPECTOR GENERAL OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY

SEC. 3. The Inspector General of the Federal Emergency Management Agency shall review standards and procedures for emergency evacuation plans for nuclear power facilities, and both the FEMA Inspector General and the Director of FEMA shall make recommendations directly to the Congress concerning the adequacy of, and the implementation of, such standards and procedures.

TESTS OF FEDERAL EMERGENCY MANAGEMENT AGENCY NUCLEAR ACCIDENT EVACUATION PLANS AND SUSPENSION OF LICENSE BY THE NUCLEAR REGULATORY COMMISSION FOR COMMERCIAL NUCLEAR FACILITIES WITH UNSAFE EVACUATION PLANS

SEC. 4. (a)(1) The Federal Emergency Management Agency shall conduct an annual test of the evacuation plan for each operating nuclear power facility in the United States, including facilities not licensed by the Nuclear Regulatory Commission.

(2) As a part of the annual test under paragraph (1) for each operating commercial nuclear power facility licensed under chapter 10 of the Atomic Energy Act of 1954, the Federal Emergency Management Agency shall submit a report to the Nuclear Regulatory Commission which shall—

(A) certify to the Nuclear Regulatory Commission that the evacuation plan for such facility assures public safety; or

(B) report findings to the Nuclear Regulatory Commission that the evacuation plan for such facility does not assure public safety.

(3) The Nuclear Regulatory Commission shall suspend the license of any facility subject to a report under paragraph

(2)(B) until such time as the facility can certify that the evacuation plan for such facility assures public safety. A facility subject to a suspended license under paragraph (2)(B) may request a retest from the Federal Emergency Management Agency for purposes of certification of public safety at any time after suspension of the license.

(b)(1) Prior to the grant of a license required for any commercial nuclear power facility licensed pursuant to chapter 10 of the Atomic Energy Act of 1954, the Federal Emergency Management Agency shall certify to the Nuclear Regulatory Commission that the evacuation plan for such commercial nuclear power facility assures public safety.

(2) A license shall not be granted by the Nuclear Regulatory Commission to a commercial nuclear power facility unless such facility receives a certification as provided in paragraph (1).

(c) The owner of a commercial nuclear power facility subject to the provisions of this section shall be responsible for the payment of any non-Federal costs associated with any test of the evacuation plan for such facility carried out under this section.

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REFORM OF THE REGULATORY PROCESS FOR COMMERCIAL NUCLEAR POWERPLANTS

WEDNESDAY, JUNE 18, 1986

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON NUCLEAR REGULATION,
Washington, DC.

The subcommittee met, pursuant to recess, at 10:15 a.m., in room SD-406, Dirksen Senate Office Building, Hon. Alan K. Simpson (chairman of the subcommittee) presiding.

Present: Senator Simpson

OPENING STATEMENT OF HON. ALAN K. SIMPSON, U.S. SENATOR FROM THE STATE OF WYOMING

Senator SIMPSON. The subcommittee will be in order.

Peter Bradford, who is scheduled to testify, has a late plane, and he will be arriving shortly. I do welcome you this morning. We will continue our hearings on reform of the regulatory process for commercial nuclear powerplants, focusing on three legislative initiatives now pending before the subcommittee: S. 1235, that is a bill I introduced to replace the NRC with a single administrator; S. 2291, Senator Biden's Nuclear Safety Board bill; and S. 2471, Senator D'Amato's inspector general bill.

Yesterday, we heard from all five of the sitting NRC Commissioners. I shall not repeat what I said in my opening remarks yesterday, or what the individual Commissioners said, but I do think I can honestly summarize yesterday's testimony by saying that there was a substantial agreement that the current collegial process of regulation simply does not work.

When you leave out the sinister aspects of what it is that is supposed to happen with regard to secret meetings, or sunshine, that isn't the issue. The issue is that it doesn't work, and we ought to be about our business in a way that doesn't trammel any existing law.

Today, it is a great privilege to hear from the four of you who are former members of the Commission and who, accordingly, have had substantial hands-on experience in the advantages and disadvantages of the current regulatory structure. All of you have been right there in the trenches, and I have learned to have great admiration and regard for each and every one of you. I look forward to your unvarnished and untarnished views of this situation.

In addition, we will also hear from Ellyn Weiss, who is the general counsel of the Union of Concerned Scientists, who also brings significant expertise and practical experience to this issue from the work that she has done on behalf of that group before the NRC and before the courts.

So I look forward to a productive session this morning. I trust that when we conclude we might somehow be closer to a consensus on the reality of what really needs to be done to improve the truly vexatious and confounding regulatory process at the Commission.

With that, let's go forward with statements from the three panelists who are here. When Peter joins us, we will have his statement and questions. With that, we will go ahead with the first panel.

John Ahearne, it is nice to see you, sir.

STATEMENT OF JOHN F. AHEARNE, VICE PRESIDENT, RESOURCES FOR THE FUTURE

Mr. **Ahearne**. Thank you, Senator.

I have submitted written testimony, and I would just summarize it.

Senator **Simpson**. I appreciate that.

Mr. **Ahearne**. My testimony covers all of the questions, I believe, that you asked, but what I am about to say will really focus only on two aspects of it.

I joined the NRC in August 1978, and within a few months I had reached the conclusion that the Commission structure was not only inadequate, but actually counterproductive for the running of the agency. This conclusion was reached before the Three Mile Island accident. Reviews of that accident strengthened my belief that a single administrator is necessary.

John Kemeny and Bruce Babbitt, from the Presidential review, strongly recommended establishing a single administrator. Mitchell Rogovin, who headed the independent review tasked by the NRC, also strongly urged a single administrator. These, Richard Pollock, and I were the only voices crying out at that time for a single administrator. We were not heeded.

Since those days, other instances have demonstrated that complex technologies can be hazardous. The events at Bhopal and Chernobyl, and the *Challenger* accident reinforce the need for competent management of complex technologies. Nuclear power is a dangerous technology. It requires extremely competent management. It requires extremely competent oversight.

The NRC is an operational agency. The NRC monitors the performance of 100 commercial nuclear power reactors and many other licensees, including operators of research reactors, industrial users of radioactive material, and the use of a variety of waste disposal mechanisms. In addition, the NRC must do licensing reviews which are not merely going down a checklist, but actually doing detailed engineering analysis of complex issues. Finally, the NRC runs a very sizable research program, approximately $100 million per year. These are characteristics of an operational agency.

The Commission structure, however, is fundamentally flawed for handling an operational agency. Even with the best intentions to make the system work, it is not possible for five commissioners, or any multiple commission to manage effectively an operational agency. So I support S. 1235, your bill, Senator, with one exception.

I believe the single administrator agency should be a part of the executive branch.

I have three principal reasons for arguing that the single administrator agency is the better approach by far for handling Federal nuclear regulation.

First, the head of an operational agency must be able to make clear and timely decisions. The Commission over 10 years has demonstrated that it cannot make clear and timely decisions.

Second, it is responsible government. Public servants should ask how can Federal agencies be made more effective in carrying out their missions. Developing policies, providing clear guidance to a staff, and ensuring that the agency follows those policies, using those guidelines, are not possible with a commission. Political theory will tell you that it is highly improbable. Ten years of experience demonstrate that it is not possible. I believe that it is time for Congress to address how can this agency be restructured so as to carry out its missions.

The third is personal experience. There is no one really in charge of the NRC because the system is designed to prevent anyone from being in charge. Five bright, aggressive people will want to do things individually, but a commission does not work effectively with individual actions. Also, because of the intense public interest in nuclear power, particularly in the Washington fishbowl, there has been a strong allure for the commissioners to focus outward rather than inward.

There are arguments against a single administrator. Three have been brought up recently:

First, the Sunshine Act will be lost. Decisions will be made behind closed doors, which will reduce the quality of the decisions, and undercut agency credibility.

Second, the NRC will be directly under OMB, and, consequently, the White House will be able to manipulate safety decisions.

Third, there will be a loss of the public's ability to hear dissenting voices.

There would be decisions made behind closed doors. The public would then have to depend on what the decision is, rather than what is said about it. There have been many cases in which the meaning of the decision was made confusing after the decision was announced. Rather than relying on what the decision stated, or what the so-called spokesman of the agency, the chairman, described it to be, the press, the Congress, and others, interpreted the decision the way that a dissenting commissioner wished it to be interpreted. This process confused the meaning of the decision, not only on the outside, but also inside of the NRC. It was very hard for the agency staff to know what that decision really meant.

A single administrator would improve the quality of the decisions. Credibility is gained or lost by the agency's actions, what the agency does, and not what is said about it. The immobile, ineffectual NRC has no credibility with most of the public.

Being directly under OMB is of some concern. Preventing the worse scenario would require the Senate, namely this committee, ensuring that a high-quality director is approved. I do not believe that the OMB involvement would be much greater than it is with the current NRC.

Finally, the nuclear arena has never been one in which someone in opposition has had much difficulty in finding a mechanism to air dissenting views. The press in Washington and the Congress always provide a platform. What a single administrator would do is to provide a single policy for the agency, one that the staff would then be able to follow because they knew what it was.

The current system, all too often, gives at least two, and sometimes as many as five policies, all of which the staff is urged to follow.

I expect there to be another accident before the end of the century, and I expect that at that time the reviews will excoriate the industry, the NRC, and the Congress. They will blame the industry, particularly INPO, for not weeding out the weak performers among the utilities, and for not demanding high competence in the management, and in the operating and maintenance staffs of the utilities. The same criticism will be focused on the NRC and its ineffectiveness. Finally, criticism will be focused on the Carter White House for not having pushed for a single administrator, and on the Congress for having delayed and dawdled, and endorsed less than the reorganization of the NRC that should have occurred after the Three Mile Island accident.

With respect to the Nuclear Safety Board, Mr. Biden's bill for an independent Nuclear Safety Board is another idea whose time has come. Hal Lewis first introduced this concept in 1977, based upon his experience with aviation safety I was not originally a supporter of an independent Safety Board, but I have seen the difficulties in getting objective reviews of the what and why of nuclear accidents and incidents. These difficulties are often due to the adversarial relationships between the NRC and industry and sometimes, I am afraid, to the NRC's concern that it may have been part of the problem. So I would endorse an independent board like the National Transportation Safety Board.

U.S. nuclear regulation is in poor shape. That is uniformly agreed to by members of regulatory agencies, commissions, and committees of the other countries that have looked at our system. Over the last 8 years, I have talked with regulatory and industry representatives from over 30 countries. I cannot recall a single representative who commented that our system of regulation was something to be emulated.

Establishing a single administrator would take a large step in pulling the Federal nuclear regulation agency onto a path to becoming an effective agency. However, it will take 3 to 5 years to undo the harm of more than 10 years. An independent safety board also would be a plus, to get at why accidents happen, to help the industry and the Federal nuclear agency make the necessary changes, and to improve public understanding.

Senator, thank you for giving me the opportunity to comment.

Senator SIMPSON. Thank you for an important and potent statement. I appreciate that.

Victor Gilinsky, consultant, formerly a member of the Nuclear Regulatory Commission. It is good to see you again, sir.

STATEMENT OF VICTOR GILINSKY, CONSULTANT, FORMER MEMBER OF THE NUCLEAR REGULATORY COMMISSION

Mr. GILINSKY. Thank you, Mr. Chairman.

Let me start with a word of background about the situation that nuclear power and the NRC find themselves in. The construction phase of our nuclear program is very nearly over. About 100 plants are operating, and several are very close to that. A number are finished, and are clearing up deficiencies. I think there are probably no more than a half a dozen that are still on the way toward completion of their original construction schedules.

There are also no further plant orders in the offing. That was the case before Chernobyl, and obviously that situation didn't improve with the news of the accident. What this means is that the job the NRC was originally set up to perform, the licensing of nuclear powerplants, is very nearly over.

There is another job, a very important job for it to do, and for the industry to address itself to, and that is the care of the operating reactors, making sure that all of them operate safely and economically. That job is complicated by the fact that we are dealing with more than 50 entities which own and operate these reactors—the various utilities. You have nearly as many designs, styles of operation, and levels of capability. The challenge for the Government and for the industry is to impose a common discipline on this group of utilities, this large group of utilities, and also—I think this is very important—to make sure that our experiences is used effectively to continually improve performance and correct vulnerabilities.

Obviously, the way the NRC carries out its job is central to the carrying out of this overall task of making sure that plants operate safely. The present NRC structure is overly cumbersome and ought to give way to something mmre efficient.

You have proposed in S. 1235 a reorganization that would have the NRC, in effect, run as an executive agency, although I notice in the bill it says that it is to be an independent agency. I am not sure I understand the difference when one person is in charge.

After thinking about this a good deal, I am still inclined to support the notion I put forward some years ago, which is that one ought to go to a smaller three-person commission. I think that this has many of the advantages—managerial advantages—of the single administrator proposal, and yet retains some of the advantages of a commission.

I think management would also be improved by instituting a statutory inspector general. The present NRC office that carries out this function seems always to be in hot water. Perhaps what is needed is someone appointed from outside. I would make one change in the proposal as outlined in S. 2471, which as it stands would give the inspector general safety functions, safety oversight functions.

I believe those would be better carried out by the Safety Board proposed in S. 2291. An inspector general would have quite enough to do without the additional safety function, and I think that it would be a very unusual person who would combine the skills that are in needed in the traditional inspector general and those needed in a safety oversight function.

Coming to the Safety Board, I believe that is an exceptionally important proposal. There is hardly anything that is more important to the continued safety of the operating plants than making effective use of operating experience. Whoever carries out that role has to be free, not only to subject to severe criticism what goes on in industry, but also what goes on in the NRC itself. I think that it is just unrealistic to expect that to happen within the agency. For that reason, I very much support the proposal for an autonomous Safety Board as outlined in S. 2291.

In order to avoid duplication of function, I would fold into that new Safety Board the present data analysis function performed by the NRC staff office, AEOD, as suggested by Senator Biden in his remarks. I would also fold into that the present function of the Advisory Committee on Reactor Safeguards, the ACRS, whose role was intended to be principally to review license applications. There are not going to be very many, and I think that job is essentially over. I think the useful life of that committee is essentially over with it.

I would only add that if Congress decides to go forward with your proposal as outlined in S. 1235 that the Safety Board should be regarded as a very important part of the overall package, and that those two changes should go forward as one proposal.

Thank you, Mr. Chairman.

Senator SIMPSON. Thank you very much indeed.

Marcus Rowden, please. Nice to see you again.

STATEMENT OF MARCUS A. ROWDEN, FRIED, FRANK, HARRIS, SHRIVER & KAMPELMAN

Mr. ROWDEN. Thank you, Mr. Chairman. It is a pleasure to be here.

In my opinion, the most urgently needed, and best founded, of the legislative proposals which you noted in your opening remarks is S. 1235, which would supplant collegiate management of the NRC with a single administrator; and I accept your invitation to contribute my unvarnished views.

To be blunt, the Commission structure for nuclear regulation has proved unworkable. As I see it, there are at least four major problems with that structure.

First, the collegial structure defeats a requisite of sound public administration—indeed, I would submit, of representative government—that of clear authority and accountability for agency performance. Where everybody is in charge, nobody is; and where collegial management reigns, such as it does at the NRC, no single public official, be it the Commission members, the Chairman, or the President himself, can be fixed with clear accountability. This, in my view, is wrong. When programs or policies fail, or agency management is ineffective or inefficient, the Congress and the public should know clearly who is to be held to account, and that account should be paid.

NRC's collegial structure, my second point, has led to excessive reliance on case-by-case treatment of regulatory issues, and to overjudicialization, both of the licensing process and of the nuclear regulatory program itself. Confronted by the institutional obstacles of consensus operation—and they are very real—the Commission has largely abdicated its policysetting responsibilities to the day-to-day workings of the regulatory staff and to ad hoc decisionmaking by its licensing boards. These failings will be magnified, I believe, as the NRC completes the licensing of the present generation of nuclear plants and becomes primarily a regulatory program manager.

Third, the present NRC structure undermines effective policy leadership. While difficulties in policymaking are a problem for most collegially run bodies, the situation at NRC is exacerbated by the nature of nuclear regulation and by the often decisive role played by decisions of the agency's staff in its ongoing licensing, enforcement, and other interactions with the regulated industry.

Fourth, the Commission structure impedes effective management of the NRC staff. One of the principal findings of the post-TMI Kemeny Commission, and of the NRC's own Rogovin Inquiry, was that the NRC, in Mitchell Rogovin's words, is "an organization that is not so much badly managed as it is not managed at all." In a real sense, collegial management of the regulatory program is an experiment that failed. The NRC inherited its Commission structure from the former Atomic Energy Commission with minimal congressional consideration as to its regulatory fitness.

Paradoxically, I might add, the AEC was structured as a collegial body because of its defense program responsibilities, not its regulatory or other civil nuclear programs. More instructively, perhaps, every other major Federal safety program is headed by a single administrator. It has been economic regulation which Congress has histocally vested in collegial bodies.

The Carter administration, ignoring the single administrator advice of the post-TMI blue ribbon panels, made only patchwork changes to the NRC. These changes have clearly failed.

At congressional hearings in 1984, in 1985, in 1986 and yesterday also, I understand, the majority of the NRC Commissioners, including its present Chairman and its Chairman-designate, expressed their support for change to a single administrator.

The time has come to take that step. S. 1235, in my view, merits subcommittee support and congressional action. I might add, in making that recommendation, that I have assumed that the new agency will be an independent agency within the executive branch since the administrator or director would serve at the pleasure of the President—at least that is the way I read the effect of the legislative proposal.

I would urge that my assumption be made explicit, either in the legislation or in the legislative history, since I think the position of the administrator should clearly be one of serving at the pleasure of the President if the President is to have accountability for the effective management of that agency.

I also hold a somewhat different view as to the appointment of the assistant directors in the agency. My own inclination, or my own disposition, would be to have the assistant directors appointed by the director or administrator rather than by the President.

Having stated my support for S. 1235, I must add that I feel otherwise about S. 2471, which would establish an Office of Inspector

General in the NRC. I have no difficulty with the concept of an office within the NRC that would perform the traditional role of an agency inspector general. Furthermore, I believe there should be an NRC office which has responsibility for auditing the managerial effectiveness of the various agency program units. Those functions, I believe, should be carried out under the authority of an official who reports to the agency head, rather than to a senior staff official.

This, in fact, describes the functions of NRC's present Office of Inspector and Auditor. Given the relatively small size of NRC, and the relatively modest scope of its private sector contract activities, I see no sound reason for a Presidentially appointed inspector general as proposed in S. 2471.

I strongly oppose the creation of a statutory functionary having the additional responsibility of performing safety related activities—a seeming main thrust of S. 2471—that is, reviewing safety procudures and proposing safety regulations as is proposed in S. 2471.

In my opinion, the responsibility for nuclear safety regulation should rest with a single regulatory body. Establishing other agencies or functionaries with independent overlapping regulatory missions is a prescription for divided authority, confusion, and regulatory instability. This serves neither the interests of safety nor that of good government.

I would add that I have comparable views about the creation of an independent Nuclear Safety Board as proposed in S. 2291. I believe there should be an office within the NRC that has responsibility for accident and other significant event investigation, and that reports directly to the Commission or other agency head. This, in fact, was the recommendation of the so-called Brookhaven Report, in the preparation of parts of which I participated. I still believe that course to be sound, although the Commission chose a different path. Nonetheless, I am disposed to give the event investigation mechanism which the NRC has recently established, the so-called Incident Investigation Program, a chance to work since it has shown promise in its initial operations.

In any event, before launching still another regulatory agency, which is what an independent Nuclear Safety Board would in fact be or become, we ought to see whether and how well this function can be performed by a separate and independent office within the NRC.

Mr. Chairman, your letter of invitation invited our views on what other steps should be taken to improve regulation of commercial nuclear power. I would only contribute my three priority listings; they would be licensing reform, licensing reform, and licensing reform.

Thank you.

Senator SIMPSON. Thank you very much.

How do you do, former Commissioner Bradford? Nice to see you. I thought that on a day like this, you were fly fishing. I would have been in my other life, and we will have to do that together one day. I know we have that common bond. Nice to see you here, and we appreciate hearing what you would share with us.

STATEMENT OF PETER A. BRADFORD, COMMISSIONER, MAINE PUBLIC UTILITIES COMMISSION

Mr. BRADFORD. Senator, I apologize for coming late. Until today, I had boasted of never having been on time for a congressional hearing and never having kept anyone waiting. I am afraid that I have broken that record.

In order to prescribe for a sick patient, assuming that there is agreement that the patient is, in fact, ill, a doctor has to first successfully diagnose the illness. Because the possible diagnoses as to the NRC differ so widely, have their own vehement adherents, and require such different remedies, a sensible doctor or legislator would review very carefully the symptoms before prescribing.

The most important symptoms seem to me to include the following:

Events of serious safety and economic significance have taken place at U.S. nuclear powerplants. Fortunately, the damage has been almost entirely economic, but the fact is that these units have surprised their owners, their builders, and their regulators too often for comfort.

Second, despite the best efforts of the Department of Energy and the NRC, the waste question remains essentially unresolved, and is the subject of diminishing rather than increasing public confidence.

Third, all of the nuclear powerplants ordered since 1975 have been canceled, some after expenditures of billions of dollars, and none have been in any case ordered since 1978.

Fourth, the economics of nuclear power now appear to be unfavorable compared to almost all other sources of electricity, including coal.

Fifth, according to a recent CBS poll, 68 percent of the American public now oppose constructing more nuclear powerplants. A decade ago, 71 percent thought that it was important to continue or to expedite the construction of new nuclear units.

My own diagnosis as to the root cause of these surprises is that this industry grew much too fast in terms of its actual operating experience between 1965 and 1975. During this period, the regulators were single mindedly devoted to expanding the uses of nuclear power and to overseeing the transition to reprocessing and to breeder reactors, as they then thought.

When the lessons of operating experience began to roll in, such as the pipe cracking problem, the Brown's Ferry fire, various types of fuel failures, steam generator tube problems, and the inadequacy of seismic design, terribly expensive lessons had to be applied in plants that were well under construction.

Significant problems in terms of waste management and nonproliferation received little attention. Offsite emergency planning received virtually none. Operator training and control room design were underestimated, as were hydrogen control, quality assurance, and the qualification of equipment to withstand an accident environment.

Some of these shortcomings came to light at Three Mile Island, others showed up in malfunctions at other plants. Still others emerged as a result of testing and analysis. This process cost billions of dollars and destroyed the substantial public consensus in favor of nuclear power that existed a decade ago.

Against this background, what are the strengths and weaknesses of the three bills before you?

It seems to me that S. 2291 and S. 2471 have one shortcoming in common. They both seek to do for the NRC what a capable NRC ought to be doing for itself. In so doing, it seems to me, they distract attention from the absolutely crucial question of who is appointed to serve on the NRC.

As to S. 2291, the extent of this weakness seems to me to be fatal. The NRC really does not bear the same relationship to nuclear plant operation that the FAA, with its extensive operational responsibilities, bears to airline safety. The NRC was itself supposed to function as a Nuclear Safety Board toward the nuclear industry. It has its own Advisory Committee on Reactor Safeguards and its own internal capability for investigating operational errors, mishaps, and accidents.

With all due respect to the bill's sponsors and their legitimate frustrations with the NRC's response to Salem and other problem areas, I do not think that another independent agency to oversee the NRC is likely to be an effective response.

An administration committed to nuclear safety will make its priorities felt in its appointments to the NRC itself. Lacking this commitment, any administration's appointment to the Safety Board will not be effective. The distance of the Safety Board from day-to-day regulation may at first make it less defensive of conventional wisdom and practice, but this is not likely to be an enduring advantage.

The only circumstance in which a Safety Board makes much sense to me is if the Congress enacts the single administrator agency proposed in S. 1235, which I oppose for reasons that I will cover in a moment.

I am not personally familiar with the workings of offices of Inspector General. While S. 2471 is vulnerable to some of the same criticisms as S. 2291, it has some offsetting virtues. For one thing, it would put an end to the deplorable hash that the NRC has made of its Office of Inspector and Auditor. For another, it might improve both the way in which the NRC conducts investigations, and the NRC's continuingly difficult relationship with the Justice Department. For another, because it will not be a separate board with competitive overtones, it is less likely to bog nuclear regulation down in bureaucratic warfare.

In an ideal world, this legislation would not be necessary. The divergence of views among the commissioners together with the independent inputs from the ACRS and the licensing boards, to say nothing of congressional oversight and public intervention, would be adequate to assure that the NRC itself dischraged the functions of an Office of Inspector General. Since that has not happened, and shows no serious prospect of happening in the near future, I think that S. 2471 deserves your favorable consideration.

As to S. 1235, with its proposal to replace the existing commission by a single administrator headed agency, I can understand and sympathize with this measure as an expression of frustration with the current NRC.

Senator Simpson, your statement in introducing the bill was a fair and clear analysis of problems that do exist at the NRC. However, I don't think that the proposal will work as intended for several reasons.

First, I don't think that it gets at the underlying causes of the problems of nuclear power. The reasons for that view were set forth in some testimony that I gave several years ago in the wake of the original recommendation by the Kemeny Commission in this direction, and President Carter's followup reorganization plan. I have attached that testimony as Attachment A, and I won't repeat it further at this time.

Second, I am afraid that the proposed change substitutes reorganization for a more fundamental change in approach. While it might buy a grace period of sorts, and improve internal NRC morale, depending on the person actually appointed to head the agency, the failure to make more fundamental changes in approach would inevitably mean a return to today's situation within a year or two.

Third, a single administrator agency would inevitably slow the flow of information to both the Congress and the public. If you look back over the last decade, I think that you will inevitably come to the conclusion that much of what the outside world learns about the internal workings of the NRC comes in the form of separate views expressed by one or more commissioners in disagreement with the majority's course.

Fourth, I come from a State in which nuclear power is a source of continuing and exceptional controversy. Twice in the last 5 years referenda to shut down Maine's only operating nuclear powerplant have gotten more than 40 percent of the vote. A third such effort in 1987 seems likely. There is no way that I can imagine the replacement of the existing Commission by a single administrator serving to diminish that level of public concern, and it may enhance it.

Fifth, I don't think that the alternative of an effective collegial regulatory commission has ever been given a fair trial at the NRC. A collegial agency is almost inevitably less efficient than a single administrator, and it does mask accountability, both at the Commission level and between the Commission and the President. However, it has offsetting strengths if its members are chosen for their competence and their ability to work together as a team. This can only occur if the chairman is a figure capable of commanding broad public respect for his or her previously demonstrated commitment to nuclear safety and if that individual is actively consulted as to other appointments whose talents, views, and backgrounds are a constructive supplement to those of the chair. This formula has never been tried at the NRC to my knowledge.

Sixth, the single administrator approach inherently lacks the very stability that nuclear power urgently needs. Because the individual in charge can be replaced following a Presidential election, the swing from a President strongly supportive of nuclear power to one who is more skeptical could produce quite a sudden change of regulatory direction of just the type that a commission structure insulates against. If the financial community had to factor into its existing analysis the likelihood that President Reagan might be succeeded by one of the announced Democratic candidates with considerably cooler views toward nuclear energy, and that the nuclear regulatory climate would change dramatically overnight, nuclear power's prospects would not be improved.

There is something of a middle ground between the existing Commission and S. 1235 that I think has much to recommend it. That middle ground consists of reducing the NRC to three members. Having served on both a five-member and a three-member Commission, I have found that the potential for discord is much less in a carefully chosen three-member agency, supplemented by a public advocate or by an office of public counsel.

The only difficulty at the Federal level, but it is a substantial one, is that the sunshine law, as currently written, would prohibit any two of the members from ever meeting informally. I don't think that the benefits of the sunshine law are so great as to preclude its being modified to permit the reduction of several of the Federal agencies to three members permitted to have nonpublic discussions of agency business.

Maine's sunshine law offers wide latitude for informal discussions among the three Commissioners as long as the discussion does not seek to decide pending cases, and our working relationship is much better than the overall intracommission climate at the NRC with which I was familiar.

I have on other occasions made a number of proposals that I think would strengthen the regulation of nuclear power and make it publicly acceptable. These include the modification of the current Federal preemption of the States from any say in nuclear standards and the adoption of either a public counsel's office or a program of intervenor funding for the NRC.

I have attached a talk that sets forth some of these approaches in more detail. They are sufficiently far removed from anything in the legislation before you that I will not reiterate them now. Packaged together with S. 2471 and S. 1235, they might conceivably command broad support.

I would be glad to work further with the subcommittee on that basis or in any other way that I can be helpful.

Senator SIMPSON. I thank you very much. All four of you contributed very nicely to the issue.

Let me ask several questions. To what extent do each of you view the collegial interaction—that is the word we hear—as being the great advantage of the structure?

You were there. How much collegial formulation of actual policy, with all five Commissioners present, actually took place on the Commission during your tenure?

If you could each briefly respond to that, please?

Mr. AHEARNE. I am just stunned by trying to describe that quickly. Guerrilla warfare is much closer a description than collegial discussion.

Senator SIMPSON. That is a rather precise definition.

Peter, we will go down the line here.

This is what I am seeking. It is a collegial body, and how much policy did you college about?

Mr. BRADFORD. All of the Commission decisions on rulemaking, on adjudication, on policy statements, were hammered out at meetings of the full Commission, however many there may have been. Most of those decisions were reached with formal dissent through what I think were sincere efforts of the all the Commissioners to bring their views into a workable whole.

The problems that I think John is alluding to, I don't mean to say that they were not there. The Commission was divided on many important matters, and certainly those differences of view surfaced publicly, sometimes heatedly. To some degree, that is to be expected.

I think that the difficulty, in the years that I was at the NRC, came in part because there was some tendency to choose the different Commissioners to satisfy different constituencies rather than with an eye toward their ability to function as a unified whole, and in part because the sunshine law, whatever its virtues, does deny the full group of five Commissioners the opportunity ever to sit down informally and discuss and talk through whatever difficulties exist in the way that the Commission is functioning.

Senator SIMPSON. Thank you.

Victor, do you have anything to add with regard to that question?

Mr. GILINSKY. The process deteriorated badly over the years that I served on the Commission. We started out in the beginning with—I hope that Marc is not going to contradict me—a fairly strong effort on everyone's part to argue things out within the Commission, and to reach a decision after views had been exchanged and particularly after opinions had been written.

I remember at the time when Mr. Rowden was chairman, we would always exchange our opinions, discuss them, and only issue a decision after that process had been worked through. Toward the end, you had the opposite result. People would just come in, vote, and then have opinions written by assistants, or someone, afterward in a pro forma fashion, which is the very opposite of what one ought to be doing.

A lot of this has to do with the nature of the persons involved, the outlook of the chairman. Marc had been General Counsel of the AEC, and he worked with the Commission, and he had a strong view about that sort of thing; others were more technically oriented, and less interested in the Commission process.

For one reason or another, things deteriorated over time.

Senator SIMPSON. Marcus.

Mr. ROWDEN. Mr. Chairman, my views are colored by a snapshot of history, the first 2½ years of the Commission's existence, which were my period of service on it. The fact is that it was the first Commission; in a certain sense the people were selected with at least some view to their ability to work together. The members of the first Commission were bonded together by a determination to make the operation a going one, and probably by the personality of the individuals involved. This led us to make, I think, a calculated and reasonably successful effort at collegiality.

There were strong-minded people on the Commission at that time, including my colleague, Dr. Gilinsky, and he and I disagreed on a number of occasions, but I would have to say that the disagreement was attended by civil discourse, reasoned exchange, and respect for each other's points of view even though they were very firmly held and led to quite opposite conclusions.

To look at that Commission through a romantic haze is to disregard the lessons of subsequent history which are more typical of Commission operations, particularly in an area as contentious as this. The fact of the matter is, you have no more commonality of purpose on the Commission. You don't have the bonding element that we experienced. People are different. The process has deteriorated. It has unraveled to a point where I see no reasonable prospect of putting it together.

I have heard suggestions, including those at this table, that the appointment of the right people to the Commission would cure that, but the commission form of governance really defeats that purpose. The universe of people who are going to be willing to serve on a commission is really a diminishing one. Qualified people who are going to be willing to serve on a commission are really diminishing because the nature of the contribution they can make is viewed as not worthy of their talents, and that is a very important factor in terms of the type of management you have.

Mr. AHEARNE. Let me just follow up with one point Marc said. I think that to make the Commission work, what you would have to do is to find one person who has the characterics that Peter described, and four people who are in semiretirement, who believe that they do not wish to be very heavily involved in the issues, who are quite happy merely meeting to discuss in a slow and deliberative process some adjudicatory items.

But getting the five competent, energetic individuals involved in the complex issues that nuclear power has, particularly in the heated public debates that nuclear power has, seems to me to make the Commission unworkable.

Senator SIMPSON. Let me go on and then we can come back. There is a question of diverse perspective, we have heard that, diversity of views, that is what it was for. Interestingly enough, you referred to what the original mission was, as you discussed things with diversity and collegial interaction, but those things are no longer there.

Policy, from what I can determine, is not discussed. What is discussed is a certain plant, or its deficiencies, or those issues. Then, we talked about the fact that the single administrator might not work, and yet we have a single administrator at EPA or FDA or the FAA, and there is an interaction there, I guess, which is the administrators and their staffs, and then the public.

Does this Commission, this NRC, have a broader perspective and diversity and skill than other health and safety agencies simply because it has more members?

Mr. AHEARNE. Senator, are you asking is the mission broader, or does it try to get involved in broader areas?

Senator SIMPSON. Does it have a broader perspective? Does it have a breadth of wisdom and intelligence because it has more members?

Mr. AHEARNE. I don't believe so. I think what has tended to happen is that the members occupy, to a large extent, their time on trying to position themselves on a particular issue, position themselves so that that final decision, or whatever it is, of the agency, satisfies both their own perspective and their constituencies.

Peter mentioned that one of the problems has been that there has been a tendency to appoint members to the Commission to fill this constituency's desires or that constituency's desires. I think that there has really been a lack of focused attention on trying to understand: Here is an agency. What are its justifiable missions? How best can those be done?

I think the single administrator agencies that you mentioned have ability to be more focused. If the opposite of focused is broad, then, yes, it is broader.

Senator SIMPSON. You have all spoken about the Nuclear Safety Board proposal, and a couple of you have endorsed that idea. I hear the reference back to the NTSB, and I have had some personal observations of that particular organization. How would a nuclear safety board be structured to avoid some of the politics—we are all aware that that is the essence of things here, but I think that that has plagued the NTSB. It has become an elephant graveyard of some very dazzling people they have tried to put on there, that both parties have rejected. I hate to see this be the model somehow. To me it doesn't serve as the model.

I would like your views on how do you structure that to avoid some of the things that I think have plagued the NTSB?

Mr. AHEARNE. You probably, Senator, have seen a different side of the NTSB than I have. The side I have seen has tended to be the professional competence of the investigators. I gather that there has been, last year, perhaps, a departure of some of those people, or a desired departure.

The NTSB has, over the years, developed a core of well-respected investigators. They have developed a technique to involve the industry immediately in the investigation of accidents that has been described as unique not only for the United States but for any country.

The problems that you just seem to mention, perhaps the members of the Board not being suitable people, I am afraid that is a problem that is perhaps all pervasive through many administrations, and I am not sure how, other than constant vigilence in the Senate, you can do much about that.

Mr. GILINSKY. I have a comment on that, Mr. Chairman. It seems to me a safety board serves a function that is very important. You want to make sure that you are using experience well and fully, and analyzing accidents properly, including not only the events in the industry, but what happens at the NRC as well, and criticizing them to the extent that they should be criticized.

As Mr. Bradford pointed out, this is something that should be happening within the NRC right now, but the fact is, it is not really being done very well. It is something that the agency has had difficulty doing over the years.

Years ago, there was an office called Office of Operations Evaluation. It was in a position to write a report card on the rest of the process, on the licensing activities. The bureaucracy felt very uncomfortable with that. It didn't want to have an office that was criticizing other offices, and the thing got abolished.

There is an office that was created after TMI—in part because of the events at TMI, and in part because of earlier events—called AEOD, in order to better analyze data. It has turned out to be a very, very quiet office, not an office to make waves, again because they are caught up in a bureaucratic situation with all of those pressures which make it difficult to criticize the agency itself.

I don't know that the Safety Board needs to be a separate agency, although I would say, if you move forward with your proposal to create a single administrator agency, then perhaps it ought to be entirely separate. Under the present commission, it ought to be a statutory office, something like the ACRS, but oriented toward operations.

The ACRS, I think, has gotten a bit tired, and the whole thing needs a new organization, a new function, and I am all for creating a new office for that reason.

Senator **Simpson**. Let me just say to you, yesterday, one of the NRC sitting Commissioners suggested that we might consider folding the NRC into the EPA.

Mr. **Gilinsky**. I can guess which one said that.

Senator **Simpson**. It was said, and I wonder if you would give me a swift comment on that.

Mr. **Bradford**. It would probably be the end of the EPA.

Senator **Simpson**. What did you say, Peter?

Mr. **Bradford**. It would probably be the end of the EPA.

Mr. **Ahearne**. EPA has many problems. Lee Thomas, I believe, is a highly competent individual, who has some chance of pulling EPA back together again, and trying to make some sense out of the conflicting legislation that they have been given, and all of the problems that they have had over the years.

I don't believe that putting another major, ineffective agency into that agency is going to do much more than to help pull them both down.

Mr. **Gilinsky**. Could I have one more comment, Mr. Chairman?

Senator **Simpson**. Yes; you could, and then I have a couple more questions that I would like to get into.

Mr. **Gilinsky**. We are basically getting the functional equivalent, or the moral equivalent, or whatever you want to call it, of a single administrator agency in the way things are moving at the NRC. I don't think that anyone ought to have any illusions about that.

The question really is whether you want to have some extra Commission offices which provide a forum for various individuals to present their views. The place is getting very much centralized. The one office that reported to the Commission as a whole, the Policy Office, has been abolished. I notice that the general counsel appointment was issued by the chairman, and it is an office that reports to the Commission as a whole. Things are tending toward centralization even under the current structure.

Mr. **Rowden**. Mr. Chairman, I don't want to appear remiss in responding to your question about the NTSB concept. This has much currency now, it is a very seductive idea. We will establish an independent group, independent of the NRC, or a single administrator agency, to investigate accidents and perform other safety oversight functions.

I think that, despite the superficial attractions of proceeding down that road, there are some rather severe problems that one ought to look at squarely before a new agency is set up.

I understand that if there is to be a single administrator operation for NRC, there will be a different type of political environment in which one has to examine the matter of checks on the agency that are external to the agency itself: but I come back to my basic proposition that to set up what is in effect another regulatory agency is something that is going to compound the problem rather than contribute to its solution. This is based on my observation of some 25 years in the bureaucratic jungles, most of which has been in the nuclear program. What the program has suffered from is a surfeit of checks and balances. What it has lacked is unitary direction and management.

Senator **Simpson**. I concur with that. This is what I have found.

Let me just ask you a question about accountability, that word arises, whether specifically having a single administrator accountable to the executive branch is an advantage or a disadvantage. If you could each comment briefly on the impact of that, positive or negative, single administrator that is part of the executive branch would have on decisionmaking and policy?

Mr. **Ahearne**. If you set up a single administrator agency, it makes then logical sense to imbed it within the executive branch. I don't believe that is going to lead to any great influence of the White House, for example, on the policy, other than the type of influence that one would expect as the Nation's mood is reflected in elections both of the President and the Congress.

I think that we have seen examples in EPA's situation of that type of a reflection of the country's moods, and if a redirection was necessary, it was taken relatively quickly.

Senator **Simpson**. Any other comment?

Mr. **Gilinsky**. In terms of accountability, clearly if you have one person, the accountability is a good deal more clear than it is with a group.

Mr. **Rowden**. I would make the President accountable, that is really the bottom line in my opinion. It does no good to have a single administrator whose political life is in no way dependent upon the disposition of the President to keep that individual in office or not. That is the bottom line in terms of political accountability in our system.

Something goes wrong at the agency, fundamentally wrong, then the President will take the needed steps because the political process will dictate that those steps be taken. We have seen the way that process has worked historically, and I think it has worked basically in an effective manner.

Mr. **Bradford**. I think that there is no question that a single administrator in the executive branch would increase both the accountability of the administrator because it would be one person instead of five, and the overall accountability of an administration because it could not make reference to the eccentric behavior of that independent commission some of whose appointees were theirs, and some of whom were not.

So I agree that you do get increased accountability all up and down the line. I don't agree, though, that you wouldn't as part of that process get increased White House influence, for better or for worse. I have no doubt at all that through the appointment of the top personnel, through the workings of the budgets, through the making of any decision on which the White House and DOE inputs were proper, or even marginally proper, that you would see a great deal more administration influence. I think that it goes hand in hand with accountability.

Senator **Simpson**. I appreciate that.

The question of public participation arises as a continual theme, and should be a continual theme in the decisionmaking process; the public visibility of the actions of the Commission. Could you please each comment briefly on whether the broad public interest, beyond some of the Washington-based, public interest groups, is that honestly better served by this collegial approach or by a single administrator?

Mr. **Gilinsky**. It depends a lot more, Senator, on who is in those positions than it does on anything else. These organizational differences are marginal compared to that. They do make a difference. I guess it is going to be a more open process if you have a commission, and it will be a tighter process if you have a single administrator, managerially likely more efficient. The public ultimately is better served by whichever one produces more safety. But, as I said, that is going to depend a lot more on who is in those jobs than on the system.

I would also add, there isn't any silver bullet here that is going to take care of everything. It is interesting that in this case we are talking about tightening things up, and in the case of NASA, they are talking about creating additional boards that would pass on this and that—astronaut boards and other boards to introduce checks on the system. There are problems either way, and the thing is to find a reasonable balance. Ultimately, it depends on who is in charge.

Mr. **Ahearne**. With respect to the last point that Vic mentioned about NASA, I think we have to be careful on what lessons are learned from there. There is still a lot more of the studying of accountability and what kind of a management process was in place.

As far as your question, Senator, on how would the broad public interest be better served, I think that the broad public interest is better served by making this an effective—I don't want to use the word "efficient" because that carries a pejorative sense in some quarters, but an effective public agency. The NRC is not effective.

Senator **Simpson**. I am very interested in your comments, Peter Bradford, because as we got into the issue of having to deign to speak about the sunshine law everybody flunked the saliva test. I have no desire to dismantle the sunshine laws. I worked on that when I was a State legislator. I sponsored it, and got a lot of flack for it in those days, and that was back in the sixties and it wasn't very hot stuff.

So, I don't have any quarrel about that, but for heaven's sake, to hear the babble about the sunshine laws when we see something that won't even allow a visit in the hallway, because you have two layers of lawyers now down to one, at least partially getting down to one, preventing it and giving all of this counsel on the bureaucracy, which must just stagger you from your days as Commissioners, even in this short time of less than 10 years when you served as Chairman in 1977.

To say that you have some flexibility in the sunshine laws in your Commission work in Maine, and that is what you are saying, I would like you to share that with the committee. We would like to have that information as part of this hearing record because in my mind that is a magnificent shunt when someone begins to talk about that, and ordinarily it is from people who really don't give a whit about the nuclear, commercial industry in any sense, which is another interesting part of it. I have had a lot of little ironies like that since I got to be chairman of this subcommittee. Give me some more information on that.

Mr. **Bradford**. The Maine sunshine law requires that fundamental agency decisions be made in public, and that the discussions leading directly to them also be made in public. It does not require that general discussions of agency business or agency direction, apart from specific cases, be publicly noticed. The result is that as a practical matter those often take place informally over lunch, in the corridors, as you put it, with all three commissioners present. That really helps in a collegial agency to head off the problems in a number of ways, from the very simple ones where you don't have to go through the process of putting out a public notice and waiting, to the more obvious and deep rooted, the ability of people to discuss things sometimes more openly when they are not in the public eye as to ways in which the workings of the agency can be improved.

The Federal law, of course, does have exceptions for things like personnel matters, but the fact is that not all problems are necessarily personnel problems. It is just easier to work things out, I think, if the sunshine law doesn't require that matters, other than the formal decision of cases, be taken up in the public eye.

It does go hand in hand with the importance of collegiality. I have suggested reducing the NRC from five to three members, but I would stop there. I think that with necessary reforms, there are real benefits to collegiality, and we have, after all, 50 State commissions that belie—some of which, not all of which, belie the proposition that you can't have effective collegial regulation.

There are six commissions that I know well in New England, and only one of them could be said to have the kind of problem on a continuing basis that the NRC has had for years.

Senator **Simpson**. Thank you.

Mr. **Rowden**. I never had to operate fully under the Sunshine Act, although as I recall we put it in place on an experimental basis just after the legislation was enacted, even though we were not required to. We set the tape recorders running and frankly forgot about it.

I guess I hold a rather jaundiced view. I know that this act is cloaked with public virtue, but my own view is, do you want good government, or do you want show biz?

I really think that the Sunshine Act is antithetical to the operation of a collegial body. It adds to the enormous number of restraints that are now imposed on government decisionmakers. We don't lack for checks and balances on the ability or the willingness of government officials to make decisions. What we have are built-in disincentives for them to do anything that will expose themselves to public criticism. I think that this is one of the underlying vices of the Sunshine Act.

The other is that there is a lack of ability to get together to exchange the sort of views which are necessary to form the consensus which is at the heart of collegial decisionmaking.

My view, however, as to the desirability of a single administrator has nothing to do with the existence or nonexistence of the Sunshine Act.

Senator SIMPSON. Thank you.

Mr. AHEARNE. I would come very close to what Marc just said. I have never been an ardent advocate of the Sunshine Act because I think that it has encouraged posturing rather than debate. But I don't think that complete elimination of the Sunshine Act would have solved the problems that I see within the Nuclear Regulatory Commission as such. It would make it, perhaps, slightly more workable, but not much. I think that that is really a separate issue.

Senator SIMPSON. I have other questions, but I must press on. I have some other obligations, and I know you do, too. You are busy people. I really appreciate this. I think many times with the three of you, not with Mr. Rowden because he was gone before I came to the Senate, but I remember going through Three Mile Island, with the three of you often at that perch, and Gary Hart as chairman and I as ranking minority member. Then I became chairman and Gary the ranking member, it is much more fun that way, of course.

I have been consistent on this single administrator theme as I do my oversight duties, I guess it comes down to one thing for me, and it comes back to what you aresaying, either you do your work or you are posturing, around here, and there is a lot to do.

I have often said, out of the 100 of us, there are about 85 of us who came to work, and there are 15 of us who came here to raise hell, and they are from both parties, and America is now seeing them in action via television. They will have a good idea, in a year, of who those are, I hope, and that is why I voted for it.

It would be very painful if we have another transient, as we call them, and to watch these new fine people, of very diverse backgrounds, sit at that table with 12 cameras on themselves, warding off the snakes. It will be bizarre. It will bring them all up to ridicule, and they, again, will have to rely on Harold Denton to pull them through, I guess. That is what I am thinking about.

It is not going to affect me. I have been working on this baby, trying to peal back the shades of this outfit, and watching it. Six years to make a consideration in a restart, it is bizarre. It is just a moment of time for them now, 6 years, it is just a sketch on the screen.

It doesn't matter who is chairman and who is on it, if you have layering after layering of tentative, doubtful, fearful people who can't make a decision. and that is what we have, in my mind. So it is better to go to a single administrator and let him take the heat, him or her, and the President, and that is the way that it should be.

That is really one of my concerns, how the American public, the next time, and there will be a next time, I heard your statement, and I am not trying to be dramatic either, how it will be perceived that this agency, which was solely to protect the public health and safety, has so miserably gone off into the Elysian mysteries of the arcane, and dabbled in trivia, and not kept their eye on the policy and how you carry it out, and do the job. That is a concern of mine as one who has the legislative responsibility of oversight.

There is plenty of oversight, there are three over in the House. They have done their work, and continue to do their work. In any event, that is part of my review of things, and it is very frustrating. It is too bad that we have to wait for those experiences to focus thinking, but that is what is going to happen, and it will really focus it.

I thank you very much. You are very helpful, and you have been very helpful to me when you were on the commission. Thank you so much.

We will go forward with Ellyn Weiss, general counsel of the Union of Concerned Scientists.

Ms. Weiss, we will appreciate hearing your views on these issues.

STATEMENT OF ELLYN R. WEISS, GENERAL COUNSEL, UNION OF CONCERNED SCIENTISTS

Ms. Weiss. Thank you, Mr. Chairman.

The Union of Concerned Scientists strongly supports the independent Nuclear Safety Board, with the function of investigating accidents and near misses, and making recommendations to the NRC for the steps necessary to address their root causes, and prevent recurrence. In our view, it is the failure, the consistent failure to address root causes and prevent recurrence that characterizes the commission's current investigative function. We believe that the time has clearly come for an independent safety board.

There is no need to remind you of the potentially catastrophic consequences of failure to set and enforce the highest safety standards for this industry, especially since there are now 100 licensed plants in this country, and ensuring their safety has to be the top priority of the agency.

There is a wealth of evidence that the NRC is not performing the job of a strict watchdog at a cost to the safety and to our economy. The NRC is institutionally ill-suited to conduct and followup investigations because there is an inherent conflict of interest involved when the agency investigates its own conduct, and that conflict is presented implicitly or explicitly in virtually every case where an accident occurs.

For example, the Kemeny Commission found that the NRC's failures were at least as responsible for the TMI accident as any other cause, and that has continued to be the pattern in subsequent investigations. An independent organization is necessary to bring credibility to this crucial task.

With regard to the single administrator, we see three major disadvantages, and they have been discussed on the panel that preceded me.

First, the requirements of the Sunshine Act become inapplicable; second, it appears to us highly likely that NRC decisionmaking will be subjected to greater control by the Office of Management and budget. Both of these would consolidate the already unhealthy domination of NRC's agenda by the industry it regulates by diminishing public scrutiny and takjng more decisions behind closed doors.

We believe that this would be a detriment to public safety.

Third, transforming NRC to a single administrator would silence any public voicing of dissent. It would at the same time shut off a vital safety valve for communication by plant workers and NRC staff of safety problems which have been disregarded by line management within the agency, and within the utilities.

Just last week, five senior TVA employees told a story of being repeatedly rebuffed over a period of years by TVA and the NRC in their attempts to have safety problems faced and corrected. After years of failure, they finally approached Commissioner Asselstine. Had there been no safety valve, it is entirely possible that the TVA plants would now be operating despite the fact that it is acknowledged that they did not meet the most basic safety standards. We believe that it is not the time to shut off channels of dissent.

While we acknowledge the worthiness of the goal of efficiency and accountability, UCS does not believe that they outweigh the cost of a single administrator, now are we convinced that the single administrator model offers intrinsic advantages over any other.

There are many models for agency management in State and Federal Government. You have heard from former commissioners, some with disappointing experiences, some of whom believe in the single administrator. The record might be different if we heard from people who have worked and studied single administrator agencies, and looked at whether they do handle things so much better, whether decisions do get made that much faster, and whether there is a mechanism for the consideration of dissent within the agency or whether it is stifled.

I do know that some of the worst examples of mismanagement and abuse of authority are associated with single administrator agencies, and EPA is the most prominent example. Had that been the NRC, the costs could have been much greater. It is our view, Mr. Chairman, that a commission organization, whether of three or five members, is more conducive to a conservative approach to safety.

The Union of Concerned Scientists supports the concept of an inspector general, for the NRC. This is an agency that regulates an industry that has already cost the American people $125 billion, and we frankly think that it is indefensible that it is exempted from the inspector general legislation applying to most other Federal agencies.

You have also asked for our views regarding what further legislative changes could be made to improve the process. Let me make it clear that our focus is on measures to improve the safety of current plants, and to improve our assurance that the plants are being built and managed safely.

I believe there is an inherent institutional dynamic that bears a great deal of the responsibility for the NRC's failure to establish itself as a credible regulator. The NRC staff put its imprimatur on each of the currently operating plants, not only did it approve each, but it acted as a party advocate, urging its licensing at public hearings. Therefore, each time a safety problem is discovered at any plant, either implicitly or explicitly, questions are raised not only about the safety of other plants, but also about the NRC's own judgment in approving it.

This is a powerful institutional disincentive to early open airing of safety issues. The regulators hope that the problem will go away, but it doesn't, and they tend to fester and grow. Therefore, independent checks and balances are needed to provide a counterweight to an unhealthy institutional dynamic.

There are a number of reforms we supported in the past and continue to support, most have a common theme. We have learned by experience that the only way to effectively reform the NRC is to shine the light of public scrutiny on it, strengthen checks and balances, and to enhance the means for public participation in its decisionmaking.

Thank you, Mr. Chairman.

Senator SIMPSON. Thank you very much.

I have a couple of questions here. The organization that you represent, the Union of Concerned Scientists, has been very critical of the actions taken by the NRC, and some of the proposals that are now being considered here, including the single administrator proposal, because, as you describe in your testimony, you say that all decisionmaking would take place behind closed doors.

I would ask what opportunity do you have now to participate in the decisionmaking process that would be lost if the single administrator bill were to be enacted?

Ms. WEISS. Effective control by the Office of Management Budget is something which concerns us greatly. It is a matter of public record that the decisions of many of the Federal agencies are being dictated in a substantive manner by the Office of Management and Budget. Congress is now considering whether it may wish to change, by legislation, the effect of the Executive order.

We believe that it is unhealthy. It is documented that OMB review has become a conduit for off-the-record influence by the regulated industry. We think that it is unhealthy and it is an avenue that has been opened to one side and not to the other in all these debates.

We also believe that the regulated industry is already in a dominant position because of the NRC's agenda. It dominates standard setting committees, and these are things that take place sometimes way out of the public view, the standard setting committees, the advisory committees, the day-to-day contact with the staff.

To the extent that the public has any opportunity to influence this process, outside of the formal adjudication, it has to know what is going on, it has to have access to it, know what decisions are being made, what is under consideration. The provisions of the Sunshine Act, and the requirement that subjects and meetings be publicized, and that the public be permitted to attend, and a certain amount of notice be given, is the way in which persons who are met in day-to-day contact with the NRC staff, don't sit on the standard setting committees, become aware of the issues that are under consideration, both technical and on a policy level, at the commission, and have the ability to attempt, at least, to have their views heard.

Senator SIMPSON. I am trying to get to a theme. You have already said, very consistently, and you are very effective for your organization, and I am always very interested in what is said, you really have taken the position for years that this agency is simply in the pocket of the industry and the President. So what do you lose when you go to a single administrator, there hasn't been anything that has been right ever?

Ms. WEISS. For those who propose going to a single administrator, I would suggest the question is, are you going to make anything better that is now bad? Are you going to fix the problem? I don't think that you are going to fix it, I think you are going to make it worse.

Senator SIMPSON. Do you want to fix it?

Ms. WEISS. Yes.

Senator SIMPSON. Do you really?

Ms. WEISS. Yes. There are 100 nuclear plants in this country. We all have to live with that risk whether I want to see any more built or not. We have to manage the risk, and that is what the Union of Concerned Scientists is all about, Mr. Chairman, and that is what NRC's job should be.

I don't think, with all due respect, that moving to a single administrator is going to enhance its ability to maintain the safety of the currently operating plants.

Senator SIMPSON. So if we leave it like it is, it will kind of muddle along and, hopefully, collapse of its own weight anyway.

Ms. WEISS. No. I think there should be an independent safety board. I think that that would make things better. I think that there should be an inspector general, and I think that that would make things better.

Let's not be coy.

Senator SIMPSON. That is my middle name. My middle name is coy.

Ms. WEISS. I was speaking of myself.

Senator SIMPSON. I see.

Ms. WEISS. The only thing that would really make this agency better would be if five persons who are appointed who are committed not only to doing the job, but who are committed to a process by which the public could be convinced that they were doing so. That is the only way.

It doesn't matter what the statute says, it does not matter what the oversight committees do, any statutory language can be evaded, any organization can be mismanaged, and any reorganization can be thwarted. Lacking that, I believe that what we need are checks and balances.

Senator SIMPSON. We do have that with other single administrator agencies, and oversight of those agencies, and so on.

Let's go back to collegiality. What is this collegial interaction that we should preserve? How much collegial formulation of policy by all five commissioners do you think actually takes place in this commission?

Ms. WEISS. Precious little. You heard from persons far better qualified than I describe it. The collegiality that the commission began with has been destroyed. I would say that it was because the agency was polarized, and I would say that that is largely because persons who were appointed lacked a commitment to the process that fairly considers and attempts to accommodate the differing views.

I think we all agree that precious little collegiality takes place. We disagree on the prescription for correcting that. I frankly don't think that the answer is to give one person all of the authority, without the safety valve, without the dissenting voices.

We can't by any reorganization force collegiality, but we can leave a safety valve for dissent, and that is the major reason why we oppose a single administrator.

Senator SIMPSON. What about diversity, that has been spoken about. One of the reasons that we should retain it is this diversity of views brought to bear on a given issue as a result of having five commissioners. Is that any greater than the range of views by a single administrator in existing agencies as a result of the interaction of those administrators with their staff, and with the public?

What is different about that?

Ms. WEISS. I don't know what data base exists for comparison of such issues among the different models for Federal agencies. I think that it would be interesting to know if decisions get made quicker, really, in single administrator agencies than they do in commission agencies, and if they get made better, and there is more accommodation of diverse views, although that is a subjective issue and would not be easy to gather data on that we would all agree on.

I think that it makes some sense to have some diversity, to accommodate some diversity of background, irrespective of views or ideology or philosophy. I think that it is valuable for the commission to have at least one attorney who understands some of the subtleties of due orocess, the importance of some of these process issues at least from the public confidence point of view if for no other. It is important to have some people who understand various technical issues, and it has important value.

Senator SIMPSON. If we don't get to plumb and utilize that diversity because of the regulations internally within the commission, and the sunshine law, what good does it do to speak of diversity?

Ms. WEISS. I think the Sunshine Act takes a largely bad rap. For one thing, the Sunshine Act does not prevent discussion of issues that are outside of the ambit of the agency's official business. For another thing, there is a Supreme Court decision suggesting that there is an area of informal discussion even within the ambit of the agency's official business that may be appropriate.

I would, for one, be interested in taking a look at how the State of Maine has handled it with the three-member PUC. People who do not like the Sunshine Act have made it into a bogeyman and created some problems with it that don't exist. If there are some problems with it that do exist, I have a feeling that there are some innovative ways to handle it.

Senator SIMPSON. I am one of those who say that there are people lurking who would like to detonate the Sunshine Act, and that is not me. I have a track record on that one, but we are at a point where we have this body that cannot function. I am ready to hear anybody who comes in to tell me that the NRC is just working crackerjack and doing a magnificent job.

So what are we going to do with it, and you suggest that we preserve it. You have dedicated a good deal of your energies and zeal to not doing something, and I don't understand that.

Ms. **Weiss.** I am not suggesting that we preserve the commission exactly like it is. I am suggesting that we ought not to do away, and in fact we ought to enhance checks and balance. Perhaps it is the time to move from a five-member to a three-member commission. Intuitively, one expects that decisions would get made faster.

Senator **Simpson.** We have you half-way, then, haven't we?

Ms. **Weiss.** Yes. But we believe that what is needed are some institutional forces for reform that are not committed to repeating the mistakes of the past because they bear responsibility, either implicitly or explicitly, for the lousy decisions that we now live with. That is the theme behind the reforms that we suggest.

I don't think that there is any magic bullet, certainly I haven't thought of one, that is going to turn the NRC from an agency that I don't believe in into one that I do believe in, and I don't believe that you believe there is either. I think there is a combination of reforms that increase checks and balances, none of which, frankly, would be as efficacious as appointing five persons who were committed to the proposition that their primary obligation is to the public health and safety.

Senator **Simpson.** It was interesting, I think, to hear Mr. Rowden, and you were here, talking about just how it has gummed itself into inability to function, in his observation. A lot of that has come from checks and balances, and continued arrays of those by creative people. If we need to enhance checks and balances, and you have monitored things in this subcommittee for years, and we find that there are double layers of lawyers, which is now thinning, checks and balances and procedures that are dazzling.

We do not trust the Commission, that is why we have checks and balances. Why don't we go to the core of the problem and do away with the whole operation?

Ms. **Weiss.** Do away with what?

Senator **Simpson.** The Commission.

Ms. **Weiss.** If you can suggest a way that I believe would make it better, I would be all for it. I don't believe the single administrator is the way, Mr. Chairman. I don't think that you are going to cure the problem.

Senator **Simpson.** No, but being a bright lady like I found you to be, how about giving us some suggestions if we don't like the single administrator and we don't like the NRC in its present composition, and you would like to see 100 plants go forward, at least, furnishing a certain percentage of electricity in the United States. How are we going to do that?

Ms. **Weiss.** I keep coming back to the suggestion that we have made, Mr. Chairman. The fact that you keep asking the question suggests to me that you don't like the answer.

Senator **Simpson.** I would like to hear it, if I could.

Ms. **Weiss.** We believe that the Nuclear Safety Board, an independent Nuclear Safety Board would enhance the effectiveness of the NRC. It would provide more assurances of safety. I believe an inspector general would enhance safety.

Senator **Simpson.** I have heard that.

Ms. **Weiss**. I believe that independent administrative law judges would enhance the safety of the NRC.

Senator **Simpson**. I haven't heard you develop that one before. That is a new one.

Ms. **Weiss**. Right now, unlike most other Federal agencies that handle adjudications, the NRC adjudications are not handled by independent administrative law judges. They are handled by three-member panels, one of whom is typically a judge, two of whom are typically technically competent, and too many of those people are former agency personnel.

Senator **Simpson**. Let me ask you. Do you think that the National Transportation Safety Board has worked and worked well?

Ms. **Weiss**. I think that it has certainly done useful work in identifying root causes of some aircraft problems, making recommendations for reforms, some of which have been accepted and some of which haven't. I am sure that it is not perfect. I have yet to find a model of anything perfect.

Senator **Simpson**. Some say that if we went to a single administrator that there would be a violent shift in the event of another President. Opponents of that have argued that changing administrations, and the politics of the agency would show a violent shift, a fundamental difference in views, and yet I see the other health and safety agencies of the executive branch, by and large, with some notable exceptions, come from the main stream of the regulatory community.

What is this extent for the potential for violent changes in policy direction; is that a valid concern?

Ms. **Weiss**. I think it has been more typical than atypical for changes to be evolutionary at all agencies, single administrators as well as commissions. It is not normally, and I would make, to some degree, an exception of the current administration, but it has not been the practice of either Republican or Democratic administrations to appoint ideologues to these positions. It has generally been the practice to appoint people with some generally acknowledged level of experience and competence.

Senator **Simpson**. Let me ask you this because of your background in this issue for so many years. We talk about public participation and matters of greatest public interest. What we are finding now, of course, matters of greatest public interest are often licensing procedures for individual reactors where the local public indeed becomes rather actively involved.

If we were to adopt a single administrator, should we retain the basic adjudicatory framework for licensing procedures, and if we did, what sacrifice, if any, are we making in the amount of public participation in those proceedings?

Ms. **Weiss**. I think that the surest way to make sure that whoever runs this agency, whether it is one, three or five persons, doesn't have any time to pay attention to the policy issues, that he, she or they should be paying attention to, is if you give them the job to decide on each and every adjudication. They have neither the time, nor the staff, and it is not their function to do that. They should operate in the same general relationship as the Supreme Court operates toward the lower courts. They should not be deciding every case, in my view it would be a terrible mistake.

I believe that there should be at least one level of independent decisionmaking in all adjudications. There should be an independent administrative law judge who writes the recommended decision, it is public, everybody gets to comment on whether it is right or wrong, and in what respects, and whether there is an appeal board or not is not terribly important. The decision should be rendered on the basis of acceptance or rejection of the recommended decision of an ALJ.

It is crucial that the public believe that it has a fair day in court, and that the NRC not be perceived as and not, in fact, fill the function of the NRC staff as an advocate for licensing a case. It is not its job.

Senator SIMPSON. You feel they are.

Ms. WEISS. They are both de facto and de jure, they are party advocates in proceedings, urging licensing of each individual case.

Senator SIMPSON. That is why I thought we ought to make a change.

Ms. WEISS. I agree.

Senator SIMPSON. Let me ask you about the Reorganization Act under President Carter in response to the concerns of TMI, and post-TMI investigations of Rogovin and Kemeny. Do you think that that plan has been effective in addressing the questions raised?

Ms. WEISS. I am not sure if you are talking about the single administrator.

Senator SIMPSON. It went into place, that was the Reorganization Plan No. 1 of 1980, was it effective?

Ms. WEISS. Frankly, I am not sure what that was intended to achieve, whether it was the one that was supposed to clarify.

Senator SIMPSON. The one to do with the Rogovin recommendation or Kemeny. They went through this whiz-bang operation where they gave the Commissioner the opportunity to have a little more power, but not enough, and it was a fascinating little venture into nothing.

Ms. WEISS. Commissioner Gilinsky said earlier this morning, and I suspect that he is right, we are about to embark on what is in all but name very much like a single administrator agency. Commissioner Zech tends to run that agency like a single administrator agency.

Senator SIMPSON. He is not the chairman.

Ms. WEISS. The persons have been appointed who agree with that. So we are about to see, perhaps, some aspect of that model work.

Senator SIMPSON. I hope that we both agree, and I don't know if we do, I guess you can tell me, do we want to have nuclear power as a very significant option in the United States of America.

Ms. WEISS. The Union of Concerned Scientists does not rule out that nuclear power should be an option for the energy choices.

Senator SIMPSON. You don't rule it out.

Ms. WEISS. No, we don't.

Senator SIMPSON. How can we, it is here.

Ms. WEISS. I am talking about the future. There are 100 plants in operation. As I said earlier, whether there is ever another one built, that is a substantial risk we all have to live with, and we all have to be concerned about making an agency capable of handling that, managing that.

As far as the future goes, we don't rule out that a safe, inherently safe, nuclear plant can be designed, and that should be an option for future choices. We don't believe that the current generation of lightwater reactors, particularly the large, highly complex, probably unmanageable machines, constitute a viable choice for a generation of new plants.

Senator SIMPSON. What would be a viable choice?

Ms. WEISS. I am not the best person at UCS to answer this question, but there are many options.

Senator SIMPSON. Moderated graphite?

Ms. WEISS. No. There are many options, some involve taking a step backward from current technology, in other words, undoing some of the steps that were taken in an effort to increase the efficiency and the size of the current generation of reactors. If you made them smaller, and you would decrease the power density, you would quite obviously make them safer, and quite obviously give yourself a lot more time after the onset of an accident to take appropriate measures.

On the other hand, there are what you might call "high tech" concepts for inherently safer reactors, many of which are receiving attention in this country and abroad, some of which depend on basically passive safety measures, which also offer some obvious safety advantages, and they ought to receive consideration.

Senator SIMPSON. If we go ahead with standardization, and licensing reform, you will help us.

Ms. WEISS. Mr. Chairman, you should understand that standardization, the current standardization legislation does not require, nor is it even intended to encourage, the development of inherently safe designs. What is intended and what that legislation effects, and what the nuclear industry intends to do, is to replicate—to use that legislation to replicate the current generation of reactors. In fact, it would not even do so in a standardized fashion.

The bill provides for standardized design approval for components of plants, not the full plant, which would later be assembled on a site by site basis. You would have any number of combinations of standardized components on a site by site basis. You wouldn't have the advantages of standardization and you certainly wouldn't have the advantages of new safety technology. It is not intended to build these new and inherently safe plants in this country. The industry is quite open that its intention is to select what it considers the most sophisticated of the current generation of 1150-megawatt lightwater reactors and replicate those.

Senator SIMPSON. Let me ask you a final question. In the interest of trying to balance the need for independent regulation against the proposal to replace the Commission with an independent single administrator within the executive branch, could you comment briefly on the merits of a comprehensive regulatory reform package that would include the single administrator proposal—Iknow your feelings there, but I am throwing them all in—an inspector general that combines both the Office of Investigation and Auditor functions, a factfinding Nuclear Safety Board, and standardization legislation not based upon necessarily replication, but a smaller standard, no more designer awards given, no more competition among who can build the most dazzling, getting to a smaller standard reactor. I will leave out licensing reform, so that I don't overtilt the question.

Would an approach like that contain essentially elements necessary to restore credibility and effectiveness to nuclear regulation, and try to strike that balance between the executive and legislative branches?

Ms. **Weiss**. You have suggested a package that has many attractive features, that we would frankly like to look at in greater detail and discuss in greater detail with persons who have a broad range of experience.

I certainly wouldn't want to suggest that there isn't a package for reform that is available that would achieve the objective of increasing our confidence in safety, and bringing some greater rationality to a regulatory system and a licensing system.

Senator **Simpson**. I thank you very much. Thank you for coming, and thank you for your participation. I appreciate it.

I believe that this will conclude the 2 days of hearings. I appreciated very much the good help of Jim Curtiss, a superb staff person, and Dan, and Christy.

Thank you so much for your attendance, Ellyn, I appreciate it.

[Whereupon, at 11:55 a.m., the subcommittee adjourned.]

[Statements submitted for the record and responses to additional questions follow:]

TESTIMONY BEFORE THE SUBCOMMITTEE ON NUCLEAR REGULATION OF THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

JUNE 18, 1986

BY

JOHN F. AHEARNE
VICE PRESIDENT
RESOURCES FOR THE FUTURE

Senator Simpson and members of the Committee: I am pleased to be here this morning in response to Senator's Simpson's request. In your letter of June 2, Senator Simpson, you asked for my views on the advantages and disadvantages of three bills pending before the Subcommittee, namely, S. 1235, a bill to establish a Single Administrator for a newly established Nuclear Regulation Agency; S. 2291, Senator Biden's bill to establish an independent nuclear safety board; and S. 2471, Senator D'Amato's bill to establish a Presidentially-appointed Inspector General for the Nuclear Regulatory Commission amongst other items. Your letter requested my comments on the first two bills and the NRC provision of the third, and my thoughts on what steps, if any, should be undertaken to improve the regulation of commercial nuclear power.

I am submitting written testimony in response to your request and I will summarize it for the purposes of this hearing.

Single Administrator

I joined the Nuclear Regulatory Commission in August, 1978. Within a few months, I had reached the conclusion that the Commission structure was not only inadequate but actually counterproductive for the running of the Agency. This conclusion was reached before the Three Mile Island accident, which happened in March, 1979. The reviews of that accident did not weaken my belief that a Single Administrator would be better--the reviews strengthened it. John Kemeny and Bruce Babbitt from the Presidential review strongly recommended establishing a Single Administrator. Mitchell Rogovin, who headed the independent review tasked by the NRC, also strongly urged a Single Administrator. As I recall, these people, Richard Pollock, and I were the only voices crying out at that time for a single administrator. We were not heeded. Since those days other instances have demonstrated that complex technologies can be hazardous: the events at Bhopal and Chernobyl, and the Challenger accident reinforce the need for competent management of complex technologies. Nuclear power is a dangerous technology. It requires extremely competent management. It requires extremely competent oversight.

The Nuclear Regulatory Commission is an operational agency. The NRC monitors the performance of 100 commercial power reactors and many other licensees, including operators of research reactors, industrial users of radioactive material, and the use of a variety of waste disposal mechanisms. In addition, the NRC must do licensing reviews which are not merely going down a checklist, but actually doing detailed engineering analysis of complex issues. A good illustration is the process the NRC has been going through, and will continue to be going through for many years, reviewing the Department of Energy's high-level waste program. Finally, the NRC runs a very sizeable research program. Even though the amount has been dropping over the last five years, the NRC's research program still is approximately $100 million per year. These are characteristics of an operational agency. The following table illustrates some differences between the NRC and other regulatory agencies.

FY '87 (ESTIMATED)*

	Total Obligations ($M)	Obligations for Other Services(incl.R&D)	Full Time Equivalent Employment
CPSC	33.4	5.0	540
FERC	99.1	14.7	1659
SEC	110.1	10.0	1993
NRC	405.5	182.2	3369

* From Budget of the United States Government, Fiscal Year 1987, Appendix

The Commission structure is fundamentally flawed for handling an operational agency. Even with the best intentions to make the system work, I do not believe it is possible with five commissioners, or with any multiple commission, to manage effectively an operational agency.

The structure I would recommend for a Single Administrator agency would be as indicated in S. 1235, with a Director and a Deputy Director, and Assistant Directors for the principal areas of responsibility. The Director and Deputy Director would replace the current ambiguous Chairman/Commission/Executive Director for Operations (EDO) arrangement. I would retain the Licensing Board and the Appeals Board for handling the Administrative Procedures Act responsibilities of the Nuclear Regulation Agency (NRA). This concept would envision appeals from the Appeals Board to the Director being possible, in a manner analogous to the way appeals can be taken to the Administrator of EPA for those decisions taken under the Administrative Procedures Act process within EPA.

It would be very easy to accommodate combining the offices of the Executive Legal Director and the Office of the General Counsel, which I understand is underway now in the NRC. A separate hearing division could be set up in this combined legal office. I would expect effective operation to require reestablishing some type of office of evaluation to assist the director.

With regard to what functions would be appropriate for such an agency, it is not obvious to me that any of the functions of the current NRC need be given up nor those of other agencies acquired. Questions have been raised in past years about removing international responsibilities of the NRC or bringing in the radiation responsibilities of the EPA. These issues are secondary to that of whether or not a Single Administrator agency should be established. The arguments for and against these other actions can hold in the presence or the absence of a Commission or a Single Administrator structure. I do not believe there would be any difficulty for a Single Administrator agency to handle any of these issues. Consequently, I would not muddy the debate over the Single Administrator with these other, peripheral issues.

I take one exception with S. 1235. Section 4(a) establishes the NRA as "an independent regulatory agency of the Government." And Section 4(b) states that the "Agency is an independent regulatory agency." These sections imply establishing the single-headed agency within the so-called fourth branch of government, where the NRC now resides along with many other independent regulatory agencies. I did not envision such an independent agency. My concept is the same as the Kemeny Commission's, namely, that the Single Administrator agency would be a part of the Executive Branch. It is more appropriate for an operational agency to be embedded within the Executive Branch.

Being in the Executive Branch would not lead to any difficulties that could not be handled by a competent administrator. For example, the question may be raised as to how could one agency of the Executive Branch, this NRA, deal with another agency of the Executive Branch, e.g., DOE, to insist on performance standards and licensing responses when the DOE applies for a high-level waste facility license. EPA has already demonstrated the ability to stand firm in the face of DOE pressures with respect to the overall performance standards for high-level waste. The Administrator of NRA also would not have any difficulty in standing firm and insisting on the appropriate behavior of DOE as applicant.

I have three principal reasons for arguing the Single Administrator agency is the better approach by far for handling Federal nuclear regulation. My first reason is the one already given, namely, that the NRC is an operational agency, and an operational agency needs effective management. The head of this type of an agency must be be able to make clear and timely decisions. Those are the characteristics necessary for effectively running an operational agency. They are inherently not the characteristics of the Commission. The Commission over ten years has demonstrated that it cannot make clear, timely decisions.

The second reason is related to the first, namely, it is responsible government. Public servants should ask how can Federal agencies be made more effective in carrying out their missions. An operational agency works best when one person is accountable and responsible. Congressional oversight can be retained by the committees. These committees can and should examine the policies of the agency. However, developing policies, providing clear guidance to a staff, and ensuring that the agency follows those policies, using those guidelines, is not possible with a commission. Political theory will tell you it is highly improbable. Ten years of experience demonstrates it is not possible. It is time for Congress to address how can this Agency of the public be restructured so as to carry out its missions.

My third reason is personal experience. At the moment there is no one really in charge at the NRC because the system is designed to prevent anyone from being in charge. If you get five bright, aggressive people, they will want to do some things individually. But a Commission does not work effectively with individual actions. Also, because of the intense public interest, particularly in the Washington fish bowl for nuclear power, there has been a strong allure for commissioners to focus outward rather than inward, for commissioners to cultivate the press and Congressional staff who can then serve as fora for the Commissioner's views, knowing that these fora do not require the tough give-and-take of challenging debate that would be required were these views aired within the confines of a closed Commission meeting. Since the public perception is taken to be so important, there is also a tendency to be extremely hostile to any criticism. For example, a staff member who describes a technical situation differently than a Commissioner who has already received press visibility on the issue is likely to be publicly upbraided and privately hounded.

Thus, my third reason is one for which I must admit bias. My five years on the Commission led me, I believe, to see the worst of many so-called public servants. It would be easy to have become jaundiced after that experience. Fortunately, I had many other years in government where I had a quite different view of public servants, ones who really did have both an expressed and a real interest in long-term, overall public good, rather than their own personal advancement. I also saw many within the ranks of the NRC whom I would readily class as sound public servants, and, in fact, I even found them in Congress.

However, during my time on the Commission, particularly during the time that I was Chairman, I spent far too much time working to heal wounds in the staff caused by posturing Commissioners, countering misleading descriptions of technical findings, and putting out fires that had been started by my colleagues on the Commission. I attributed these problems primarily to the Commission structure. It is possible these problems were due to me or only imagined by me, or were really minor. However, both John Kemeny and Mitchell Rogovin thought otherwise and recommended a Single Administrator, as have many senior people within the NRC staff, and, I believe, every retiring NRC Chairman. But they should speak for themselves.

Now, some will raise the question: Did not the Carter reorganization plan cure these ills? No, it didn't. It missed it by a wide mark. The Carter plan did take some small, positive steps, such as establishing the EDO as a position of authority and giving the EDO/Chairman link some validity. But the Carter reorganization plan did not go very far towards establishing a strong Chairman because there was so much opposition to that idea. Many in the Congress, and four out of the five Commissioners, strongly opposed the Single Administrator or the strong Chairman concept. Two of those Commissioners worked very hard, in my view, to retain the status quo of the time. I do not believe the reorganization plan went very far.

There are arguments against a Single Administrator. Three that have been brought up recently are the following:

(1) the Sunshine Act will be lost; decisions will be made behind closed doors, which will reduce the quality of the decisions and cut against Agency credibility.

(2) the NRC will be directly under OMB, and consequently, the White House, will be able to manipulate safety decisions.

(3) there will be a loss of the public's hearing dissenting voices.

My answers to these are the following:

First: yes, there would be decisions made behind closed doors. The public then would have to depend on what the decision says, rather than what is said about it. There have been too many cases in the past in which the meaning of a decision was made confusing after the decision was announced. Rather than relying on what the decision stated, or what the so-called spokesman of the Agency, the Chairman, described it to be, the press, the Congress and others interpreted the decision the way that a dissenting Commissioner wished it to be interpreted. I have seen many cases when Commissioners would not debate their views in private, but would posture for the public. This process confused the meaning of the decision, not only on the outside, but also inside the NRC. It was very hard for the Agency staff to know what that decision really meant. Therefore, I believe a Single Administrator would improve the quality of the decisions.

As for credibility, that is gained or lost by the Agency's actions--or, at least, it should be. What should count is what the Agency does, not what is said about it. The immobile, ineffectual Nuclear Regulatory Commission has no credibility with most of those it theoretically serves, the public.

Second, with respect to being directly under OMB, with the White House manipulating safety decisions: this is of some concern. Preventing the worst scenario would require the Senate, namely this Committee, ensuring a high quality Director is approved. I do not believe the Office of Management and Budget (OMB) involvement would be much greater than it is with the current NRC. OMB obviously has placed constraints on the number of employees and on the total budget which the NRC has proposed in the Presidents' Budgets. This is most visible in the decreasing NRC research budget, which has gone down by almost 50 percent (in current dollars) over the last five years. We have recently seen problems with EPA, but these were righted. At issue also is representative government. The problems with EPA were not completely those of a rogue administrator. They may well have been an administrator carrying out what was perceived to be the policies endorsed in a recent, very sizeable elective victory. Perhaps not. But before one goes too far in criticizing an administrator of an agency, one should examine whether or not that administrator is carrying out nationally endorsed policies. In the particular case of EPA, it was soon clear that the policies were not those that the electorate wished to have followed, and, at least it seems to me as an observer in Washington, that the Congress, as well as many within the Administration soon reached the conclusion that a restoration within EPA was necessary, a restoration which was accomplished by bringing back a former administrator and then, after the house was in order, putting in place an eminently well-qualified individual to be the current Administrator.

Finally, third, with respect to the public airing of dissenting views: the nuclear arena has never been one in which someone in opposition has had much difficulty in finding a mechanism to air dissenting views. The press in Washington and the Congress always provide a platform. What a Single Administrator would do is to provide a single policy for the Agency, one that the staff would then be able to follow because they knew what it was. The current system all too often gives at least two, and sometimes as many as five, policies, all of which the staff is urged to follow.

I do not expect the Single Administrator bill to pass. It is rational, it is timely, but it will mobilize opposition from those who like the fragmentation and ineffectiveness of the NRC, and from those who appreciate getting catchy quotes from a Commissioner. Since few Commissioners have ever felt really responsible for the Agency, they have had no inhibitions from making sweeping exaggerations seldom focused on fact or analysis. The proponents will be those like Senator Simpson--including some who were against the Single Administrator when the idea was first broached--who have concluded after careful examination that a Single Administrator is necessary. Unfortunately, the emotional and sketchily-informed usually far outnumber the rational and well-prepared.

Just a few weeks ago, I heard an opponent of a Single Administrator say, "A nuclear reactor is just a way of boiling water." It really isn't. It's a dangerous technology. Yes, it boils water, but it is a dangerous technology. It needs strong management. It needs competent and effective oversight.

I expect there to be another major accident before the century is over, and I expect at that time the reviews to excoriate the industry, the NRC, and the Congress. They will blame the industry, particularly the Institute for Nuclear Power Operations (INPO), for not weeding out the weak performers among the utilities, and for not demanding high competence in the management and in the operating and maintenance staffs of the utilities. I think the same criticism will be focused on the NRC, and also on its ineffectiveness.

And finally, I believe, criticism will be focused on the Carter White House for not having pushed for the Single Administrator, and on the Congress for having delayed and dawdled and endorsed less than the reorganization of the NRC that should have occurred after the TMI accident.

Nuclear Safety Board

Mr. Biden's bill for an independent Nuclear Safety Board is another idea whose time has come. Hal Lewis first introduced this concept in 1977, based upon his experience with aviation safety. I was not originally a supporter of an independent safety board. But I have seen the difficulties in getting objective reviews of the what and why of nuclear accidents and incidents. These difficulties are often due to the adversarial relationships between the NRC and industry and, I'm afraid, sometimes to NRC's concern that it may have been part of the problem. I would endorse an independent Board like the National Transportation and Safety Board (NTSB). The Brookhaven National Laboratory (BNL) wrote a report, "An Independent Safety Organization," W. Y. Kato, et al., November 15, 1984 (draft), for the NRC as a result of a Congressional request, originally sponsored, I believe, by Senator Biden. This report led me to conclude the independent safety board would be the correct approach to solve these problems. I recognize that the Brookhaven report did not formally reach that conclusion. However, I believe its findings really lead to that.

BNL found the "direction of the investigations by an agency divorced from the regulatory, licensing, and enforcement functions" to be one of the major factors in the high effectiveness of NTSB investigations. BNL implied that establishing a board within the NRC might be much like the NTSB's first having been established within the Department of Transportation. The NTSB subsequently was made independent. I believe legislation establishing a Nuclear Safety Board should benefit from this experience and should set up the Board as an independent agency.

I would not support an independent safety board in the absence of a Single Administrator. I am afraid that adding another set of voices to those that are already chorusing around the NRC staff would merely add sand to the currently gaspingly inefficient turning of the NRC's gears.

With respect to S. 2291 itself, I believe the bill should establish the size of this organization, and authorize funding.

Senator Biden's remarks on introducing the bill as printed in the Congressional Record make it clear that the board's purpose would be to investigate. However, the language of Section 212.(f)(1) could be read as though the NRC would do the investigations. That is not a good idea. Investigation should be done by the staff of this independent board. I suggest looking at the NTSB legislation to ensure that this Nuclear Safety Board could involve industry in its investigative teams. Involvement of the industry is an essential part of the NTSB investigations. The investigations and reports done by such a board should be focused on finding out what happened and why it happened, not how to penalize who are at fault. Penalizing comes separately.

I also would support an idea that Hal Lewis has proposed, that every two years this board submit something that could be called a "Status of Nuclear Safety Report" to the Congress.

Although not in S. 2291, a bill introduced in the House in a previous year authorized a Nuclear Safety Board to monitor daily operation of nuclear plants, issue reporting requirements to NRC licensees, and give directions to a licensee during an accident. I would strongly oppose all three provisions. This board should be like the NTSB, namely, should investigate after the accident.

Finally, I would consider giving this board the authority to examine accidents at DOE facilities. Reports on such accidents might have to be classified and submitted only to the DOE and to the appropriate Congressional committee. However, I believe the expert knowledge this board would bring to such investigations could substantially improve the operating safety of the DOE reactors--just as it should improve the operating safety of commercial reactors.

Inspector General

I have not addressed the Inspector General issue in the past. Unlike the Single Administrator and the safety board issues, on which I have thought, testified, and written, I have spent little time on the Inspector General issue. However, I suggest Congress should separate two issues: (1) An Inspector General for the NRC; (2) the Inspector General in the Senate bill. They are different. The proposed bill would combine the offices of OIA (Office of Inspector and Auditor) and OI (Office of Investigations) into the Inspector General's office. Certainly the audit of Agency actions and the investigation of Agency employee wrong-doing is consistent with the traditional IG's role. I am not an expert on IG's, but I question whether OI's role is within the traditional IG's. OI's function to investigate licensee wrong-doings for possible prosecution may be beyond the usual realm of an IG. But that is a minor disagreement. I have a much stronger disagreement with the other provisions of this bill.

In Section 2.(7), the IG would "review all nuclear safety procedures carried out by the Nuclear Regulatory Commission to ensure that the best available nuclear safety standards are used"; and

"propose regulations to the Nuclear Regulatory Commission for the purpose of ensuring the public safety."

These are questions of the adequacy of the NRC's regulations for safety. They are not questions of the effectiveness of the Agency with regard to its use of public funds or of the integrity of the Agency performing its process. These are questions requiring detailed technical knowledge of nuclear regulation. They are the issues on which the Office of Research, the Office of Nuclear Reactor Regulation, the Office of Nuclear Material Safety and Safeguards, and the Office of Inspection and Enforcement primarily focus--the offices exist to examine these issues. A budget of about $400 million and a staff of several thousand essentially are devoted to answering these questions. Whether the Agency uses these resources effectively is the question we are concerned with. I do not believe that an Inspector General's Office is the one to review all of the safety procedures and to propose new regulations. Quite the contrary, one charge to a new Single Administrator should be to use the research program to review the collection of nuclear safety regulations to put a consistent body of regulations in place that incorporates the knowledge gained over the many years of research and operating experience. With regard to proposing regulations for the purpose of ensuring the public safety, that is what the NRC exists for and would be the purpose of an NRA. Obviously, new regulations should be proposed when the information is available to warrant them. These actions are not the functions of a small Inspector General's office. If the Inspector General's office were large enough to really handle both those questions in Section 2(7), the IG's office would have swallowed the Agency.

Finally, I oppose the provision of Section 2(7) requiring the IG to "prepare and transmit an annual report to the Congress concerning the adequacy of nuclear safety procedures used in the United States." I believe this requirement would be handled much better by the two-year report on the status of nuclear safety done by an independent Safety Board.

I believe that the question of an IG in the traditional sense, as present in many other agencies, is still a separate issue. I think Congress must deal with the problems that have come up with the OIA office within the NRC, and the problems that the Justice Department has had with the NRC's handling of investigations. But these are different issues than the problems I have with Senator D'Amato's bill.

Finally, Senator Simpson's letter asked whether the proposals in the three bills would improve the regulatory process and what recommendations would I make to improve these proposals. I have addressed those points in the above. The letter of invitation also asked "what steps, if any, should be undertaken to improve the regulation of commercial nuclear power."

The purpose of Federal nuclear regulation, I believe, is to allow the commercial use of nuclear power in a manner that provides good safety, and protects the environment.

Although 100 commercial nuclear plants are licensed to operate, we all know that the commercial nuclear power industry in the United States is moribund. Some may say it's dead. There are many reasons for this condition, but I do not think that they can all be focused on the NRC's ineffectiveness, nor, do I believe, are they primarily due to the NRC's ineffectiveness. One should look at the status of coal plants and note that there are very few large coal plants being ordered in the U.S. One should look around the world and notice that there are very few nuclear power plants being ordered anywhere. The principal problem with the nuclear power industry is that the need for electrical capacity has continuously been much lower than forecast. This has led to little new large baseload capacity of any kind being planned, and to many plant cancellations or deferrals. We all are familiar with the energy shocks and also with usage changes, due to conservation practices, more efficient use of energy, more efficient technologies being introduced, and the rapidly increasing wheeling and pooling of power. Last year, American utilities invested more in new transmission capacity than they did in new generating capacity. Canada has become a generation company for the United States, and as low-cost gas has become more widely available, there has been greater industrial and Federal interest in developing efficient uses of gas for generation of electricity, using such technologies as combined cycle plants. These lead to a low dollar-per-kilowatt plant that can be available in a very short time, as short as two years. These factors have far more to do with the poor health of the U.S. nuclear industry than has the NRC.

But U.S. nuclear regulation is in poor shape. That is uniformly agreed to by members of regulatory agencies, commissions, and committees of the other countries that have looked at our system. Over the last eight years, I have talked with representatives of both the regulatory side and the industry side from over 30 countries. I cannot recall a single representative who commented that our system of regulation was something to be emulated.

Establishing a Single Administrator would take a large step in pulling the Federal nuclear regulation agency onto a path to becoming an effective agency. However, it will take three to five years to undo the harm of more than ten years. An independent Safety Board also would be a plus, to get at why accidents happen, to help the industry and the Federal nuclear regulatory agency make the necessary changes, and improve public understanding. The Inspector General concept as represented in the Senate bill would be a negative. If the parts I have described as being inappropriate were removed and a traditional IG's role were put in, then the IG's effect probably would be irrelevant to nuclear regulation.

But the most important action to improve the nuclear industry in this country is to improve the industry: to get rid of the weak performers, to consolidate operation to those who are truly competent in operating plants, probably to cancel some more plants, and to restart others. I have no idea whether there is a will to do this within the industry; or whether, if the industry had a will, regulatory commissions would allow it; or if the industry came to the Congress for new legislation that would permit such operation, how Congress would respond to it. With few exceptions, I have not yet seen a belief in industry that the problems they face are worth solving.

I do believe that a Single Administrator and an independent Safety Board would go a long way to at least getting the Federal side of these problems in order.

Thank you for the opportunity to comment.

ANSWERS TO QUESTIONS FROM SENATOR ALAN K. SIMPSON

BY JOHN F. AHEARNE

#1 Q. TO WHAT EXTENT DO YOU VIEW "COLLEGIAL INTERACTION" AS AN ADVANTAGE OF THE COMMISSION STRUCTURE, AND HOW MUCH "COLLEGIAL" FORMULATION OF POLICY--WITH ALL FIVE COMMISSIONERS PRESENT--ACTUALLY TOOK PLACE AT THE COMMISSION DURING YOUR TENURE?

A. Theoretically, collegial interaction would be an advantage of the Commission structure--but as is so often true, theory fails when faced with reality. There has been a strong allure for Commissioners to focus outward rather than inward, for Commissioners to cultivate the press and Congressional staff who then serve as fora for the Commissioners' views, knowing that these fora do not require the tough give and take of challenging debate that would be required were these views aired within the confines of a closed Commission meeting.

I can recall no instance in which there was what I could call true collegial formulation of policy. I have been in several agencies (the Air Force, the Defense Department, the White House, the Energy Department) in which I participated in senior level debates on major policy issues. Those were far more collegial than the Commission. Many of the Commissioners clearly did not want to participate in a discussion of views and were more interested in taking public stands that would satisiy purposes other than having an effectively functioning agency. Regretfully, I cannot even recall an instance during the tortured days of Three Mile Island when that public posturing aspect was absent.

#2 Q. DO YOU THINK THAT THE DIVERSITY OF VIEWS THAT ARE BROUGHT TO BEAR ON ANY GIVEN ISSUE AT THE COMMISSION, AS A RESULT OF HAVING FIVE COMMISSIONERS, IS ANY GREATER THAN THE RANGE OF VIEWS THAT THE ADMINISTRATOR OF EPA OR FDA OR THE FAA HAS, WHEN HE MAKES A DECISION, AS A RESULT OF THE INTERACTION OF THOSE ADMINISTRATORS WITH THEIR STAFFS AND WITH THE PUBLIC?

A. I do not think that the NRC has a greater range of views presented than has the EPA or other single administrator agencies. In the NRC, the Commissioners when they meet to discuss do not get a range of views. What they really get is a range of preestablished positions, positions which usually are not taken on the basis of the issue presented, but rather on the basis of some other agenda: for nuclear power, against nuclear power; for increased government regulation, against government regulation. Unfortunately, these usually are hidden agenda, and the bearers of the messages are extraordinarily reluctant to admit their purpose, even in private one-on-one meetings. I recognize the inherent danger of concluding that someone has a hidden agenda--it may be a faulty inference. However, I believe I had sufficient years of experience with the individuals involved to reach a valid conclusion.

#3 Q. DOES THE COMMISSION HAVE A BROADER PERSPECTIVE THAN OTHER HEALTH AND SAFETY AGENCIES, SIMPLY BECAUSE IT HAS MORE MEMBERS?

A. I interpret this question to mean whether a broader perspective is available on the Commission rather than a broader responsibility. In that sense, my answer is related to that for Question #2, and it is "no." I believe that the views of the members, which have tended to be extremely narrow and to represent some highly vocal pro and anti-nuclear Washington-based constituencies, obscure getting a wide-range of views presented. I believe that removing the cacophony present on the Commission would enable an administrator to more clearly hear and see a true wide range of views.

#4 Q. DO YOU THINK THAT THESE OTHER EXECUTIVE BRANCH AGENCIES, WHICH ARE HEADED BY A SINGLE ADMINISTRATOR, CARRY OUT THEIR STATUTORY RESPONSIBILITIES TO PROTECT THE PUBLIC HEALTH AND SAFETY IN ANY MORE OR LESS EFFECTIVE MANNER THAN THE COMMISSION?

A. Absolutely more effectively. An operational agency works best when one person is accountable and responsible. Developing policies, providing clear guidance to a staff, and ensuring that the agency follows these policies, using those guidelines is not possible with a Commission. Political theory will tell you it is highly improbable. Ten years of experience demonstrates it is not possible.

I am familiar with EPA, less familiar with either the FDA or FAA. I have no doubt that the NRC is much less effective in carrying out its responsibilities because it is "headed," and I use that term guardedly, by a Commission.

#5 Q. OPPONENTS OF THE SINGLE ADMINISTRATOR IDEA HAVE ARGUED THAT, WITH THE CHANGE IN ADMINISTRATIONS, THE "POLITICS" OF THE AGENCY WILL SHIFT VIOLENTLY, AS DIFFERENT PRESIDENTS APPOINT ADMINISTRATORS WITH FUNDAMENTALLY DIFFERENT VIEWS ABOUT NUCLEAR POWER. YET, AS I LOOK AT THE OTHER HEALTH AND SAFETY AGENCIES IN THE EXECUTIVE BRANCH, THE HEADS OF THOSE AGENCIES HAVE, BY AND LARGE, COME FROM THE MAINSTREAM OF THE REGULATORY COMMUNITY. TO WHAT EXTENT IS THIS POTENTIAL FOR VIOLENT CHANGES IN POLICY DIRECTION OF A REAL CONCERN?

A. This issue is one that was used quite effectively at the time of the post-TMI reviews to block any movement toward a single administrator. And I agree that it is of some concern. Preventing the worst scenario would require the Senate, namely this Committee, ensuring a high quality director is approved. My conclusion is that the problems recently seen with EPA were primarily due to an administrator carrying out what was deemed to be the wishes of the public, as represented by an electoral mandate. When it was made obvious to the Administration and to the Congress that this was not the case, a rapid and sweeping change was made. I do not believe that the short period of time under which EPA had what was viewed as a different approach had much of an effect on the overall functioning of the agency. (Addressing the long-term effect on EPA requires discussing other issues, such as how EPA was originally staffed, the quality of staff provided over the past 15 years, and the overall attitudes of the electorate as reflected in their strong endorsement in two Presidential elections.)

I believe that the fundamental requirement related to nuclear power to protect the public health and safety would be strongly supported by any administration, regardless of the place in the political spectrum from which it came. I do not believe that a strongly pro-nuclear administration would conclude that safety regulations are irrelevant, nor do I believe that a strongly anti-nuclear administration would conclude that the United States could dispense with operating nuclear power plants.

I think that both of these extremes have been raised as specious arguments against a single administrator.

#6 Q. ON THE QUESTION OF PUBLIC PARTICIPATION IN THE DECISION-MAKING PROCESS AND PUBLIC VISIBILITY OF THE ACTIONS OF THE COMMISSION, WOULD YOU PLEASE COMMENT ON WHETHER THE BROAD PUBLIC INTEREST--BEYOND THE SELF-STYLED HANDFUL OF WASHINGTON-BASED "PUBLIC INTEREST" GROUPS--IS BETTER SERVED BY THE EXISTING COLLEGIAL APPROACH OR BY A SINGLE ADMINISTRATOR?

A. As I mentioned in answer #1, I don't think that the existing approach is really "collegial." I do believe that the public interest would be far better served by a single administrator. I believe that the quality of decisions would be significantly improved by a single administrator. Credibility is gained or lost by an agency's actions. What should count is what the agency does, not what is said about it. I do not believe that the NRC has any credibility with most of those it theoretically serves, the public. It could establish credibility with a single administrator. Public participation in the decision making process could be quite effective under a single administrator. A spectrum of views could be represented, just as they are now for EPA's decisions.

#7 Q. IN MANY CASES, THE MATTERS OF GREATEST PUBLIC INTEREST ARE OFTEN THE LICENSING PROCEEDINGS FOR INDIVIDUAL REACTORS, WHERE THE LOCAL PUBLIC BECOMES ACTIVELY INVOLVED. IF WE ADOPT A SINGLE ADMINISTRATOR, SHOULD WE RETAIN THE BASIC ADJUDICATORY FRAMEWORK FOR THESE LICENSING PROCEEDINGS, AND IF WE DO, WHAT SACRIFICE, IF ANY, ARE WE MAKING IN THE AMOUNT OF PUBLIC PARTICIPATION IN THESE PROCEEDINGS?

A. I would retain the basic adjudicatory framework for the licensing proceedings, that is, I would still retain the coverage of the Administrative Procedures Act, and require licenses to be granted following the opportunity for a hearing. I would retain the Hearing Board. I would follow a procedure similar to that of EPA, in which the administrator is the final reviewing authority prior to going to the Federal courts.

I do not believe that doing so would make any sacrifice in the amount of public participation in the proceedings. I will grant that it would probably be seen as a reduction in the amount of influence that could be wielded by Washington-based organizations, both industry and "public interest," as well as probably by some Congressional staff. These groups have tended to try assiduously to develop close working relationships with come Commissioners, and while not attempting to influence specific decisions, have strongly attempted to develop a framework in which the specific decision would be made. This framework would be quite conducive to their interests rather than one intended to improve the effective functioning of the agency.

#8 Q. IN 1980, REORGANIZATION PLAN NO. 1 OF 1980 WAS ISSUED BY THE CARTER ADMINISTRATION, IN RESPONSE TO THE CONCERNS RAISED BY THE POST-TMI INVESTIGATIONS. PLEASE COMMENT ON THE EXTENT TO WHICH THIS PLAN HAS BEEN EFFECTIVE IN ADDRESSING THE CONCERNS THAT KEMENY AND ROGOVIN RAISED?

A. The reorganization plan was a great disappointment to me. Prior to TMI, I had reached the conclusion that the NRC was ineffective, and that a single administrator agency would be far more responsible in meeting its public service mission: in other words, it would be good government. I testified strongly in favor of a single administrator to the Kemeny Commission and to the Rogovin Review, as well as to this Committee and to several other committees in the Senate and the House. And I argued within the Administration for a single administrator.

John Kemeny, Mitchell Rogovin, Bruce Babbitt and a very few others recommended that a single administrator was the right approach to take. Kemeny and Rogovin were quite strong on this point. But that is not where the reorganization plan came out. The Carter reorganization plan missed by a wide mark in curing the organizational ills identified by the reviews. The plan did take some small positive steps, such as establishing the EDO as a position of authority and giving the EDO/Chairman link some validity. But the Carter reorganization plan did not go very far toward establishing a strong Chairman because there was so much opposition to that idea.

I believe that it was a grievous error at that time not to go to a single administrator. It pained me to see several of my colleagues working very hard to retain the status quo under a different guise. I think the reorganization plan essentially did that--I do not think that the current legal structure of the Commission does much in the way of providing the strong leadership that is necessary. It does not provide a strong Chairman. It is entirely possible that the President with a willing Senate can find one individual to be a strong Chairman and at least two other Commissioners who will go along with that Chairman in all decisions, in which case the Chairman essentially has a guaranteed three votes. But the problem doesn't end there. It is extraordinarily unlikely that the President and Senate will find four such compliant individuals to go along with the strong Chairman. This will result in strong disagreements, and strongly worded positions opposite to that of the Chairman. These lead to confusion within the staff as to what is to be done and to confusion outside as to what did the Commission really mean to do and what is it doing. I do not think that such conflict and confusion is good government.

#9 Q. IN THE INTEREST OF BALANCING THE NEED FOR INDEPENDENT REGULATION AGAINST THE PROPOSAL TO REPLACE THE COMMISSION WITH AN INDEPENDENT SINGLE ADMINISTRATOR WITHIN THE EXECUTIVE BRANCH, PLEASE COMMENT ON THE MERITS OF A COMPREHENSIVE REGULATORY REFORM PACKAGE THAT WOULD INCLUDE--(1) THE SINGLE ADMINISTRATOR PROPOSAL; (2) AN INSPECTOR GENERAL TO CARRY OUT THE RESPONSIBILITIES OF THE NRC'S EXISTING OFFICE OF INSPECTOR AND AUDITOR; (3) A FACT-FINDING NUCLEAR SAFETY BOARD; AND (4) STANDARDIZATION LEGISLATION? WOULD AN APPROACH LIKE THIS CONTAIN THE ESSENTIAL ELEMENTS NECESSARY TO RESTORE CREDIBILITY AND EFFECTIVENESS TO NUCLEAR REGULATION, WHILE AT THE SAME TIME STRIKING THAT DELICATE BALANCE BETWEEN THE EXECUTIVE AND LEGISLATIVE BRANCHES?

A. You ask about a package which would include (1) a single administrator, (2) an inspector general, (3) a safety board, and (4) standardization legislation.

Let me respond briefly to each of them, and then address them as a package. I believe that legislation establishing a single administrator is the essential step to take. It is responsible government. Therefore, I strongly support the single administrator proposal.

I have problems with the proposal for an inspector general relating to the description of the IG's functions. Your question has the IG carrying out the responsibilities of the existing Office of Inspector and Auditor. Those functions are far less than the ones associated with the Senate bill S. 2471. My objections to that bill are described in my testimony. I have no objection to an independent IG carrying out the functions of the OIA. The problems that the OIA had are a combination of management problems, which are relatively minor, and political issue problems, which won't go away unless one goes to a single administrator.

The nuclear safety board is a very good idea, but I would urge it to be truly an independent nuclear safety board, similar to the National Transportation Safety Board. My testimony includes some problems I see in S. 2291.

Finally, standardization is a broad term which can encompass many things. I would have to address a specific piece of legislation to say whether I could endorse it completely. However, I do believe standardization would lead to many benefits for the United States' electricity consumers as well as more efficient use of the NRC's resources. Anti-trust questions and what type of standardization constraints could be prudently imposed are detailed issues that would have to be addressed within the context of any specific legislation.

With respect to the total package, the two critical elements are the single administrator and the independent safety board. I would not support an independent safety board in the absence of a single administrator. I would strongly couple the two, not because an independent safety board would be bad, but because the Commission is so ineffective that one additional set of outside pressures could bring it to a complete stop. Standardization legislation has the potential of raising a very large number of questions that could take several years of hearings to resolve. I would not want to have the single administrator idea fail because of the complexities of a related part of the package. On the other hand, if including standardization would help get the single administrator legislation through, I would be for including standardization in the package.

I believe the single administrator-independent safety board will provide the desired combination of effectiveness and credibility that would be responsible government.

July 14, 1986

Testimony of Victor Gilinsky
before the
Subcommittee on Nuclear Regulation
Committee on Environment and Public Works
June 18, 1986

Mr. Chairman, Members of the Committee:

It is helpful to view the legislative proposals on nuclear regulation pending before the Subcommittee in the light of the situation commercial nuclear power and the Nuclear Regulatory Commission find themselves in.

The construction of nuclear power plants in this country is virtually over. They are almost all already in operation or nearly so, or correcting deficiencies. There are altogether barely half a dozen plants that have yet to complete their original construction schedule.

There are also no further plant orders in the offing. That was, of course, the case before Chernobyl, and the situation has not been improved by that accident. In short, the NRC's job is no longer going to be the one for which it was designed: the licensing of new plants.

There is an important job for both the industry and the NRC, but it will take new skills and new organizational tools. That job is to make sure the operating reactors will all operate safely and economically. The task is complicated by the reactors being in the hands of fifty-odd operating entities, with nearly as many designs and styles of operation, and with a wide range of capabilities. The challenge for industry and government is to find ways to improve safety by imposing a firmer common discipline on the separate utilities and by sharing experience more effectively among them.

The way the NRC does its job of overseeing operating power plants is obviously central to this process. The present Commission is overly cumbersome and ought to give way to a more efficient structure. You have before you a proposal, S.1235, to abolish the Commission altogether and replace it with an Agency run more or less as an executive department. The proposal has many things to recommend it: among other things, it would likely improve management. I have to say that, all things considered, I am still partial to the idea of a smaller, three-person Commission, which has many of the managerial advantages of the single administrator proposal.

Agency management would also likely be improved by a statutory Inspector General. The Commission office charged with that role seems always to be in some kind of trouble; perhaps what is needed is someone appointed from outside. I would, however, make a change in S.2471 which, as it stands, gives the Inspector General an independent safety oversight function. The role is an important one, but an Inspector General will have quite enough to do without it. It would also take a rare combination of skills to cover both the traditional inspector general and safety oversight roles. It would be better to give the safety function to the Safety Board proposed in S.2291.

Writing a report card on the NRC, and making better use of operational and accident data, is a key element of any effort to enhance public safety and protection of our very large investment in nuclear power plants. If this safety analysis job is to be done properly, those who do it must be free to criticize the NRC's actions, too. The bureaucratic pressures are simply too strong to allow this to happen inside the agency. For this reason, I very much support the proposal to create an autonomous Safety Board which would identify problems and assign probable causes of accidents and make safety recommendations.

In order to avoid duplication of function, I would fold into such a Board the present NRC staff office that analyzes operational data. I would also fold in the function of the Advisory Committee on Reactor Safeguards. That committee, whose chief role was to review license applications, has also come to the end of its useful life.

VICTOR GILINSKY
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July 25, 1986

Senator Alan K. Simpson
Chairman
Subcommittee on Nuclear Regulation
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Al:

I have enclosed responses to the nine questions you sent me and those asked by Senator Stafford. I hope this comes in time to be included in the hearing record.

It was good to see you again and I thoroughly enjoyed participating in your hearing.

Sincerely,

Victor

VG/mm
Enclosures as stated

CC: Senator Gary Hart
Senator Robert Stafford

RESPONSE TO POST HEARING QUESTIONS FROM SENATOR SIMPSON

Q1. To what extent do you view "collegial interaction" as an advantage of the Commission structure, and how much "collegial" formulation of policy -- with all five commissioners present -- actually took place at the Commission during your tenure?

A1. There is something faintly derisive about the "collegial" label and I have tried to stay away from it.

There is an advantage in having serious persons of varied backgrounds and views address difficult issues. You're more likely to end up with sensible actions, and ones acceptable to a broad range of affected persons. The interaction comes about in a couple of ways. First, in the exchange of views, individual positions are modified. And in the raw bargaining to reach proposition supported by a majority there is a further accomodation.

As to what actually happened at the NRC, there was always a certain amount of bargaining over votes. Even a clear majority had to consider the possible embarassment involved in taking an extreme position. But, as I mentioned at the hearing, there was over the years a progressive deterioration of the intellectual quality of the discussions among commissioners and their willingness to consider each other's views on their merits. Perhaps this reflected the arguments outside the Commission. Perhaps the Sunshine Act had something to do with it. Certainly, the disposition of the commissioners had a lot to do with this state of affairs.

Q2. Do you think that the diversity of views that are brought to bear on any given issue at the Commission, as a result of having five commissioners, is any greater than the range of views that the Administrator of EPA of FAA has, when he makes a decision, as a result of the interaction of those administrators with their staffs and with the public?.

A2. I don't know much about EPA or FAA, but I do know there is a world of difference between dealing with assistants and dealing with equals. It would depend on the person, of course, but I would be surprised if an administrator's assistants were as blunt with him or her as Commissioners are with each other.

The other side to it is, of course, that a single person can be more decisive and there is likely, under those circustances, to be more consistency between policy and its execution.

All of this makes me think that a smaller, three-person commission would be a reasonable compromise between judiciousness and dispatch.

Q3. Does the Commission have a broader perspective than other health and safety agencies, simply because it has more members?

A3. It is difficult to compare because the issues before the various agencies are so different. Still, while there is no guarantee, I would expect the Commission to have a broader perspective than does a single person.

Q4. Do you think that these other Executive Branch agencies, which are headed be a single administrator, carry out their statutory responsibilities to protect the public health and safety in any more or less effective manner than the Commission?

A4. I don't know. They have all come in for their share of criticism.

Q5. Opponents of the single Administrator idea have argued that, with the change in administrations, the "politics" of the agency will shift violently, as different presidents appoint administrators with fundamentally different views about nuclear power. Yet, as I look at the other health and safety agencies in the Executive Branch, the heads of those agencies have, by and large, come from the mainstream of the regulatory community. To what extent is this potential for violent changes in policy direction a real concern?

A5. "Violent" seems too strong, but the swings in policy from election to election would likely be greater than they are now. That isn't necessarily bad. After all, that's what elections are about. But it is something to take into account. Also, it would not help if the technical staff became overly politicized, and that could easily happen.

Q6. On the question of public participation in the decision-making process and public visibility of the actions of the Commission, would you please comment on whether the broad public interest -- beyond the self-styled handful of Washington-based "public interest" groups -- is better served by th existing collegial approach or by a single administrator?

A6. There is likely to be more public participation and more visibility of agency actions under a Commission than under a single administrator. That is what the law and Congress demand. You have only to compare the NRC with DOE.

The broad public interest is best served by whichever arrangement best promotes safety and environmental protection. On the whole, the effect of organization is much less significant than who it is who is running the agency.

Q7. In many cases, the matters of greatest public interest are often the licensing proceedings for individual reactors, where the local public becomes actively involved. If we adopt a single administrator, should we retain the basic adjudicatory framework for these licensing proceedings, and if we do, what sacrafice, if any, are we making in the amount of public participation in these proceedings?

A7. I don't expect there will be many licensing proceedings to deal with in the next decade (beyond the several operating license proceedings that will be wound up soon) so the matter is largely academic. Leaving that aside, I have mixed feelings about the adjudicatory proceedings. They are an awfully painful way to decide what are at bottom technical issues and, in an ideal world, the machinery of adjudication would be used more sparingly. The trouble is that, as things stand, without the procedural rights participants have in adjudicatory hearings those who are dissatisfied with agency actions would get nowhere. (Would the Western states, for example, be willing to give up their procedural rights in the waste repository hearings?) The key, I think, is for the agency to conduct itself in such a way that licensing proceeding participants do not feel they have to exercise their full rights in order to get a fair hearing. We're a very long way from there.

Q8. In 1980, Reorganization Plan No. 1 of 1980 was issued by the Carter Administration, in response to the concerns raised by the post-TMI investigations. Please comment on the extent to which this plan has been effective in addressing the concerns that Kemeny and Rogovin raised?

A8. The principal recommendation of each of these post-TMI reports was the elimination of the Commission, which the Plan did not do. It has, however, come close to achieving the moral equivalent -- it has had the effect of subtly undermining the functioning of the Commission in a variety of ways.

Q9. In the interest of balancing the need for independent regulation against the proposal to replace the Commission with an independent single administrator within the Executive Branch, please comment on the merits of a comprehensive regulatory reform package that would include -- (1) the single administrator proposal; (2) and inspector general to carry out the responsibilities of the NRC's existing Office of Inspector and Auditor; (3) a fact-finding Nuclear Safety Board; and (4) standardization legislation? Would an approach like this contain the essential elements necessary to restore credibility and effectiveness to nuclear regulation, while at the same time striking that delicate balance between the Executive and Legislative Branches?

A9. If Congress is inclined in favor of a single administrator, it should regard the inspector general proposal and Nuclear Safety Board as essential parts of the package.

I'm not sure I know what you mean by

"standardization legislation". Increased standardization is desirable, but I don't see a useful role for legislation. The crucial factor against standardization has not lack of legislation or NRC rules, but the fragmented state of the nuclear industry. This is something the industry will have to come to grips with.

Restoring credibility and effectiveness is a pretty tall order. One can only hope.

RESPONSE TO SENATOR STAFFORD'S QUESTIONS

Q1. Do you believe that the present structure of the Commission adversely affects the protection afforded to the public health and safety?

A1. What matters most from the viewpoint of public protection is not the Commission structure but the quality of the commissioners. I have come to believe, however, that the two are not entirely independent, and that the functioning of the agency would be improved if the number of commissioners were reduced.

Q2. One of the reasons for the abolition of the AEC and the creation of the NRC was the conflict of interest between the promotional and regulatory responsibilities of the AEC.

If the NRC were converted into an agency under the control of the executive, would it be possible to separate the promotional policies of the executive from the regulatory functions of the agency?

A2. There would likely be a greater blending of the two. One has to add that there has been a fair bit of confusion about promotional vs. regulatory responsibilities on the Commission, too.

Q3. Several persons, including high-ranking officials in the Justice Department, have stated that the NRC, as an institution, is incapable of seriously pursuing intentional wrongdoing in the nuclear industry.

Based upon your experience, do you think that the NRC is capable of investigating potential criminal violations of the Atomic Energy Act or is the NRC too close to the industry which it regulates to conduct that type of investigation?

A3. The agency has not had the stomach for pursuing intentional wrongdoing. The reasons for this are several. Closeness to the industry is just one factor, and probably not the most important one. Another is that the agency staff are mostly technical persons, uncomfortable in the role of policemen. And the commissioners have certainly not encouraged the staff to be active in this area.

Q4. Do you support legislation, such as S. 891, requiring firms supplying, owning, or operating the components of nuclear power plants to report known defects concerning potential safety hazards and to report known failures to comply with NRC regulations? Would this legislation improve the process for the regulation of nuclear power?

A4. I was under the impression that such an obligation existed already, at least to the extent of reporting failures to comply with NRC regulations. I would want to see the precise provisions, with which I am unfortunately unfamiliar, before commenting further.

STATEMENT
OF
MARCUS A. ROWDEN
PARTNER
FRIED, FRANK, HARRIS, SHRIVER & JACOBSON

HEARINGS ON NUCLEAR REGULATORY REFORM
BEFORE THE
SUBCOMMITTEE ON NUCLEAR REGULATION
OF THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

June 18, 1986

Mr. Chairman and Members of the Subcommittee:

My name is Marcus A. Rowden. I am a partner in the law firm of Fried, Frank, Harris, Shriver & Jacobson, resident in the firm's Washington office.

Between January 1975 and June 1977, I served as one of the first five Commissioners of the newly established Nuclear Regulatory Commission, and between April 1976 and the expiration of my term on June 30, 1977, I was the Commission's Chairman.

In your letter of invitation, Mr. Chairman, you asked me to comment on three legislative measures pending before the Subcommittee which would make basic structural changes in the management and implementation of the nuclear regulatory program: S.1235, a bill to replace the present five-member Nuclear Regulatory Commission with an agency headed by a single administrator; S.2471, a bill to establish an Office of Inspector General in the Nuclear Regulatory Commission; and S.2291, a bill to create an independent Nuclear Safety Board.

Change From Commission to a Single Administrator

In my opinion, the most urgently needed, and best founded, of these proposals for structural reform is S.1235 which would supplant collegial management of the NRC with a single administrator. To be blunt, the Commission structure for nuclear reglation has proved unworkable. As I see it, there are at least four major problems with that structure:

First, the collegial structure defeats a requisite of sound public administration -- indeed, of representative government -- that of clear authority and accountability for agency performance. Where everyone is in charge, nobody is; and where collegial management reigns, such as at the NRC, no single public official (be it the Commission members, the Chairman or the President himself) can be fixed with clear accountability. In my view, there is no more sobering or salutory principle of sound government than that of accountability. When programs or policies fail or agency management is ineffective or inefficient, the Congress and the public should know clearly who is to be held to account -- and that account should be paid.

Second, the collegial structure of NRC has led to excessive reliance on case-by-case treatment of regulatory issues and to overjudicialization -- both of the licensing process and of the nuclear regulatory program itself. Confronted by the institutional obstacles of consensus operation, the Commission has largely abdicated its policysetting responsibilities to the day-to-day workings of the regulatory staff and to ad hoc decisionmaking by its licensing boards. These failings will be magnified, I believe, as the NRC completes the licensing of the present generation of nuclear plants and becomes primarily a regulatory program manager .

Third, the present NRC structure undermines effective policy leadership by the agency's statutory head. While difficulties in policymaking are a problem for most collegially run bodies, the situation at NRC is exacerbated by the nature of nuclear regulation and by the often-decisive role played by decisions of the agency's staff in its ongoing licensing, enforcement and other interactions with the regulated industry. Yet, at NRC, policy making and management are separated -- the former being the ostensible responsibility of the Commissioners and the latter the province of the Executive Director for Operations. These responsibilities should be fused in one politically accountable chief executive officer.

Fourth, the commission structure impedes effective management of the NRC staff and, in consequence, of the agency's regulatory programs. One of the principal findings of the post-TMI Kemeny Commission and of the NRC's own Rogovin inquiry was that the NRC (in the words of the Rogovin study) is "an organization that is not so much badly managed as it is not managed at all." The managerial failings of the NRC, those studies concluded, are directly attributable to the diffusion of authority among the five Commissioners.

In a real sense, collegial management of the regulatory program is an experiment that failed. The NRC inherited its commission structure from the former Atomic Energy Commission with minimal Congressional consideration as to its regulatory fitness. Paradoxically, the AEC was structured as a collegial body because of its defense program responsibilities -- not its regulatory or other civil nuclear programs; in fact, the AEC's regulatory program was managed by a senior staff officer with minimal Commission involvement. More instructively, perhaps, every other major Federal safety program is headed by a single administrator; it has been economic regulation which Congress has historically vested in collegial bodies.

The Carter Administration tried to prop up the commission structure at NRC, without altering it, through Reorganization Plan No.1 of 1980. Ignoring the advice of the President's and the NRC's post-TMI blue-ribbon panels, which recommended that the Commission be replaced by a single administrator, only patchwork changes were made by the 1980 Plan. These changes have failed to cure the Commission's fundamental structural flaws. At Congressional hearings in 1984, 1985 and 1986, a majority of the NRC Commissioners -- including its present Chairman and Chairman-designate -- expressed their support for change to a single administrator.

The time has come to take that step. It would improve management of the agency, facilitate policy making, and ensure accountability. And if these improvements can be realized, the cause of nuclear safety will necessarily be advanced.

In short, S.1235 merits Subcommittee support and Congressional action.

Office of Inspector General

I feel otherwise, however, about S.2471, which would establish an office of Inspector General in the NRC. I have no difficulty with the concept of an office within the NRC that would perform the traditional role of an agency Inspector General -- investigating fraud, waste and corruption within the Agency and among its contractors. Furthermore, I believe there should be an agency office that has responsibility for auditing the managerial effectiveness of the various program units of the organization and reporting its evaluations to the agency head. Those functions, moreover, should be carried out under the authority of an official who reports directly, and is accountable only, to the agency head.

The foregoing, in fact, describes the functions of NRC's present Office of Inspector and Auditor. Given the relatively small size of NRC and the relatively modest scope of its private sector contract activities, I see no sound reason for a Presidentially appointed Inspector General as proposed in S.2471.

I strongly oppose the creation of a statutory functionary having the additional responsibility of performing safety-related activities -- as is the seeming main thrust of S.2471 (i.e., reviewing safety procedures and proposing safety regulations) In my view, the responsibility for nuclear safety regulation should rest with a single regulatory body -- one which possesses the authority, resources and expertise to discharge its safety mandate and is accountable to the political branches of government for the exercise of that mandate. Establishing other agencies or functionaries with independent overlapping regulatory missions is a prescription for divided authority, contention, confusion and regulatory instability. This serves neither the interest of safety nor that of good government.

To sum up, I believe enactment of S.2471 would be a mistake.

An Independent Nuclear Safety Board

I have comparable views about the creation of an Independent Nuclear Safety Board, as proposed in S.2291. I believe there should be an office within the NRC that has responsibility for accident and other significant event investigation and that reports directly to the Commission (or other agency head). This was the recommendation of the so-called Brookhaven report, in the preparation of parts of which I participated.

I still believe that course and several of the related Brookhaven recommendations to be sound, although the Commission choose a different path. Nonetheless, I am disposed to give the event investigation mechanism which the NRC has recently established (the Incident Investigation Program) a chance to work, since it has showed promise in its initial operations. In any event, before launching still another regulatory agency, we ought to see whether and how well this function can be performed by a separate office within NRC.

For all of these reasons, I oppose enactment of S.2291.

* * * *

As to what other steps should be taken to improve the regulation of commercial nuclear power, I would urge priority attention for legislation to reform the nuclear licensing process. The Congress should move forward on that front now.

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MARCUS A. ROWDEN
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August 27, 1986

Hon. Alan K. Simpson
Chairman
Subcommittee on Nuclear Regulation
Committee on Environment and Public Works
Washington, D.C. 20510

Dear Senator Simpson:

In response to your request following my testimony at the Subcommittee's June 18 hearing on reform of the nuclear regulatory process, I am enclosing my responses to the written questions which you posed and the questions posed by Senator Stafford. I understand that my responses will be included in the formal record of the hearing.

I want to express my personal appreciation for the courtesies which you extended during the Subcommittee's hearing and my high regard for your initiative and leadership in addressing needed reforms of the nuclear regulatory program. If there is any additional contribution I can make in that effort, I would welcome your contacting me.

With warm personal regards.

Sincerely,

Marc Rowden
Marcus A. Rowden

MAR:fa
Enclosure

Post-hearing questions from Senator Alan K. Simpson
for Marcus A. Rowden

I (a) To what extent do you view "collegial interaction" as an advantage of the commission structure?

(b) How much "collegial" formulation of policy -- with all five Commissioners present -- actually took place at the Commission during your tenure?

Answer

(a) An argued advantage of collegial management is that it affords a diversity of perspectives on significant issues which would not be available to a single administrator. Ideally, from this diversity of views comes consensus in policy setting and decisionmaking. The reality of collegial management of the nuclear regulatory program is, however, markedly different from that ideal. Rather than consensus from diversity, the product of multiple conflicting views has too often been stalemate and drift. Coupled with that, moreover, have been the managerial and other problems associated with collegial operation of the NRC, as summarized in my testimony to the Subcommittee.

Furthermore, the claimed diversity advantage of collegial interaction in nuclear regulation overlooks the way in which regulatory issues are raised, considered and resolved. In point of fact, single administrator management of the nuclear regulatory program will not undermine the expression or consideration of diverse viewpoints in the resolution of important issues. Diverse views would continue to be held and debated among the regulatory staff, licensing boards, the ACRS and the multiple other contributors to agency policy setting and decisionmaking (the regulated industry, public interest groups, etc.), even though issue resolution would be the ultimate responsibility of a single administrator rather than a collegial body.

There are areas of governmental activity where consensus decisionmaking has been deemed appropriate by the Congress. These have generally involved the setting of rates (e.g., ICC, FERC), the allocation of limited public resources among competing applicants (such as broadcasting channels by the FCC) and other areas of economic policy setting and decisionmaking (the FTC, SEC, etc.). The NRC, of course, has a quite different mission -- to set standards for the safe use of nuclear materials and facilities and then apply those standards. In such cases, Congress -- wisely in my view -- has entrusted safety policy setting and decisionmaking to agencies headed by a single administrator (e.g., FAA, EPA, FDA).

My own view of the "diversity" argument coincides with that expressed in the Rogovin report:

> The desire for "diversity" in part mistakes what we believe to be the proper roles for the regulatory agency, the Executive and Congress in our nuclear safety program. We do not believe the proper function of the Commission or administrator should be to

> consider and resolve competing public attitudes about nuclear policy in every individual safety decision that is made. It is precisely this hidden pressure that has played an important role in paralyzing the Commission in the past few years. Decisions about the ultimate safety objective in the regulatory program, and about the expansion or the reduction of our country's reliance on nuclear power -- decisions which inevitably involve a balancing of the risks against the benefits of this technology -- should ultimately be made by the Executive and Congress, as part of the Nation's overall strategic energy policy.

(b) My views on the "collegial" operation of the Commission in the formulation of policy during my tenure at the NRC are set forth in my oral testimony before the Subcommittee on June 18.

II. Do you think that the diversity of views that are brought to bear on any given issue at the Commission, as a result of having five Commissioners, is any greater than the range of views that the Administrator of EPA or FDA or the FAA has, when he makes a decision, as a result of the interaction of those administrators with their staffs and with the public?

Answer

I do not believe that the range of views brought to bear on issues by the five-member NRC is any greater than would be the range of views accessible to a single administrator, as is the case with EPA, FDA or the FAA. Based on my experience, the diversity of views that are brought to bear on issues at the NRC are primarily the product of staff development and analysis, and the contributions to the regulatory decision base made by the nuclear industry and by other interested private sector groups. Single administrator management of NRC would not constrict the expression of those views or agency access to them.

The basic processes of the nuclear regulatory program would assure this. Rulemaking would continue to draw on the views of the staff, the nuclear community and interested persons -- nation-wide. And in licensing proceedings, the openness of the process to participation by persons whose interests may be affected would continue to make NRC decisionmaking amenable to the consideration of diverse views.

In sum, the expression and consideration of a wide range of viewpoints is not dependent on the NRC being administered by a collegial body rather than a single administrator.

III. Does the Commission have a broader perspective than other health and safety agencies, simply because it has more members?

Answer

I do not see in the overall record of consensus decisionmaking at NRC a broader perspective than that evidenced by the policies and actions of other health and safety agencies managed by single administrators. It may be, that on some occasions the sheer number of NRC decisionmakers added to breadth of perspective; however, the value of this (if, indeed, it did occur) would have been marginal in light of the diversity of views available from the regulatory staff and other contributors, as outlined in my answer to question #II. The marginal value of broadened perspective in such cases is more than offset by the substantial disadvantages of collegial management of the regulatory program, as set forth in my testimony before the Subcommittee.

IV. Do you think that these other Executive Branch agencies, which are headed by a single administrator, carry out their statutory responsibilities to protect the public health and safety in any more or less effective manner than the Commission.

Answer

Based on reports from the exercise of Congressional oversight, media coverage, and the assessment by critics of each of these programs, I have no reason to believe that these other agencies are less effective in the discharge of their statutory public health and safety responsibilities than is the Commission.

I would underscore my conviction that the NRC -- irrespective of its collegial management -- has met its statutory responsibility to protect the public health and safety. I do believe, however, that the agency's ability to discharge that responsibility could be met more effectively and efficiently with single-administrator management. This is particularly so in the era which the nuclear power program has now entered, where the regulation of nuclear power plant operation, as contrasted to licensing review and authorization, has become the dominant agency function.

V. Opponents of the single administrator idea have argued that, with the change in Administrations, the "politics" of the Agency will shift violently, as different Presidents appoint administrators with fundamentally different views about nuclear power. Yet, as I look at the other health and safety agencies in the Executive Branch, the heads of those agencies

> have, by and large, come from the mainstream of the regulatory community. To what extent is this potential for violent changes in policy direction a real concern?

Answer

New Administrations do bring new policies to government; this is a healthy part of our political process. Governmental experience, however, teaches that the workings of the appointment process and effective Congressional oversight place practical constraints on "wild swings" in agency policy.

The fact that a single administrator's performance would reflect directly on the President acts as a significant constraint on the appointment process. As the 1971 report of the President's Advisory Council on Executive Organization (the "Ash Counsel") stated in its report:

> If a President has only one position to fill as the head of a regulatory agency, the appointment will receive more careful consideration [than would the appointment of one of five commission members] since the administrator will be responsible for all operations of the agency and his performance will reflect more directly on the President.

In this regard, it is worth observing that the persons appointed to serve as NRC Chairmen by Presidents Carter and Reagan were remarkably similar in regulatory philosophy, notwithstanding the markedly different approaches of the two Presidents to nuclear power.

Moreover, once in office, a single administrator would be personally accountable, not only to the President but to the Congress, for agency performance. And, of considerable practical importance, the agency's professional staff and regulatory program infrastructure (a continuing body of previously adopted regulations, policies and licensing decisions) would provide substantial checks against radical shifts in regulatory policy.

Further, if a steady regulatory course is to be the measure of the most desirable form of agency management, one must note that the current commission structure has not produced a satisfactory degree of regulatory stability. Indeed, lack of stability is one of the principal deficiencies attributable to that structure.

VI. On the question of public participation in the decisionmaking process and public visibility of the actions of the Commission, would you please comment on whether the broad based public interest -- beyond the self-styled handful of Washington-based "public interest" groups -- is better served by the existing collegial approach or by a single administrator?

Answer

(a) Public Participation. Change in the structure of the NRC from one of collegial management to that of a single administrator should have no impact whatsoever on public participation in the agency's decisionmaking processes. Policy setting and adoption of regulatory standards would still be accomplished through a rulemaking process that will entail the same means for public participation as now apply. Similarly, as respects licensing decisions, the provisions for public participation through licensing hearings will remain applicable. In short, I see no way in which public participation would be adversely affected by change to a single administrator.

(b) Public Visibility. It is my further view, that the nuclear regulatory process and agency actions would continue to have an extraordinary level of public visability in a single administrator agency.

It has been argued that single administrator management would reduce the public visibility of the policy making process since the nuclear regulatory agency would not be subject to the strictures of the Government in the Sunshine Act -- the situation which now obtains for virtually all other federal agencies with health and safety responsibilities. (Paradoxically, it is the strictures of the Sunshine Act that hobble efforts at collegiality within the current NRC structure.) I do not consider that Act's inapplicability to a single administrator agency to be a meaningful limitation on the visibility of nuclear regulatory agency operations, given the overall context of the agency's policy setting and decisionmaking and the high public profile both would continue to have under a single administrator.

It is important to bear in mind the public visibility that would continue to obtain under a single administrator structure, such as proposed in S.1235. NRC rulemaking would continue to be conducted under the public notice and comment procedures mandated by the Administrative Procedure Act; the licensing process would remain open to public participation and scrutiny; and the NRC practice of making publicly available virtually every piece of paper generated in its regulatory activities would also presumably continue. Thus, nuclear regulatory policy setting and decisionmaking would remain the most publicly visible of governmental processes.

VII. In many cases, the matters of greatest public interest are often the licensing proceedings for individual reactors, where the local public becomes actively involved. If we adopt a single administrator, should we retain the basic adjudicatory framework for these licensing proceedings, and if we do, what sacrifice, if any, are we making in the amount of public participation in these proceedings?

Answer

It is my view that the present process for licensing nuclear power plants requires reform irrespective of whether the regulatory agency is headed by a five-member body or by a single administrator. Legislative proposals to reform the process around the concept of design standardization -- with related modifications calling for generic preapproval of designs, advance site approval, single stage licensing of nuclear power plants, and stability for regulatory approvals once granted -- have been submitted by the NRC and by the Administration (DOE) and are now pending in the Senate. As I have testified before the Subcommittee, I strongly support licensing reform along the lines indicated.

I see no reason to adopt a different approach to licensing reform if there were to be a restructuring of the NRC to provide for its management by a single administrator. The important point as respects public participation is that licensing reform along the lines stated above would enhance that participation by providing for earlier and more meaningful hearing opportunities for the affected public.

VIII. In 1980, Reorganization Plan No. 1 of 1980 was issued by the Carter Administration, in response to the concerns raised by the post-TMI investigations. Please comment on the extent to which this plan has been effective in addressing the concerns that Kemeny and Rogovin raised?

Answer

In my testimony before the Subcommittee on June 18, I characterized the changes made by Reorganization Plan No. 1 as "patchwork" in nature. Those changes did not address the basic infirmities in the collegial structure of the NRC that both the Kemeny and Rogovin reports identified. While certain of those changes have been beneficial -- particularly as respects the enhanced managerial role of the Executive Director for Operations -- the 1980 Reorganization Plan fell far short of the mark. I think it is most instructive, in the subject regard, that former Chairman Palladino, Chairman Zech, and every member of the Commission save one has strongly endorsed conversion of the agency to single administrator management, citing the failures of the present collegial structure to work effectively.

My comments on this point are not intended as a reflection on the individuals who have served the NRC during this period or on their desire to make the present system work effectively. What has transpired is, in large measure, a reflection of the inherent disabilities of collegial management.

IX. In the interest of balancing the need for independent regulation against the proposal to replace the Commission with an independent single administrator within the Executive Branch, please comment on the merits of a comprehensive regulatory reform package that would include -- (1) the single administrator proposal; (2) an Inspector General to carry out the responsibilities of the NRC's existing Office of Inspector and Auditor; (3) a fact finding Nuclear Safety Board; and (4) standardization legislation. Would an approach like this contain the essential elements necessary to restore credibility and effectiveness to nuclear regulation, while at the same time striking that delicate balance between the executive and legislative branches?

Answer

I believe it is eminently sensible to combine in one legislative proposal the process and structural changes that are embodied in the pending licensing reform bills and in the legislative proposal to change the management of NRC from a commission to a single administrator. Insofar as legislation to create a single administrator is concerned, I would repeat my endorsement of substantially all that is contained in S.1235. Standardization legislation (i.e., licensing process reform) could, in my view, follow the general lines marked out in both the NRC and DOE proposals, with such changes as are deemed desirable in lignt of the hearings that the Subcommittee has held on this legislation. Certainly, there is a wide consensus on the central elements of desirable process reforms, along the lines indicated in my response to question VII.

My position regarding an Inspector General and a Nuclear Safety Board should be prefaced by some explanatory comment. The creation of external bodies to oversee the nuclear regulatory process should be approached with great care. It is worth noting that during the brief existence of the Nuclear Safety Oversight Committee (established by President Carter following the TMI accident), it sponsored a report on the "Governance of Nuclear Power" written by a group headed by Graham Allison, Dean of the John F. Kennedy School of Government. One of the questions addressed by the Allison group was: To what extent should the NRC be counter-balanced, scrutinized or reviewed by an outside group of overseers? The Allison group concluded that: "What the nuclear regulatory process needs least in this world is another layer of oversight, counterbalancing and review." Creation of such a body, in the group's view, "seem[ed] as likely to compound the problem as to contribute to the solution." In support of that conclusion, the Allison group quoted Governor Bruce Babbitt, a member of the Kemeny Commission and Chairman of the Nuclear Safety Oversight Committee, who had warned that "regulatory problems cannot be solved by duplicating regulatory functions."

Inspector General.

Consistent with the policy principles underlying the Inspector General Act of 1978, I see no justification for a Presidentially-appointed Inspector General in an agency of the relatively small size of the NRC with its modest private sector contract activities. Functionally, I would reach the same conclusion as respects an agency headed by a single administrator. If, however, the Congress determines otherwise for a single administrator agency, such an official's responsibilities should be confined to those historically associated with this office in other federal agencies. This means investigating waste, fraud, abuse and wrong-doing internal to the agency and among its contractors. It might also be acceptable to consider including within such an Inspector General's activities the audit functions presently conducted by the NRC's Office of Inspector and Auditor.

I would be strongly opposed to any structural change which would empower an Inspector General to exercise safety-related functions. Such a role for an Inspector General, or any other outside body, is a prescription for divided regulatory authority, confusion and instability. This would clearly be counterproductive to the interests of nuclear safety.

Nuclear Safety Board.

I believe that the accident investigation function should be maintained within the nuclear regulatory agency itself; thus, I am strongly opposed to the creation of an independent Nuclear Safety Board. There are compelling reasons for maintaining this function within the regulatory agency: the accident investigation function must draw on the technical resources of the regulatory agency; its exercise has direct regulatory ramifications; and its housing in a separate agency holds the clear potential for divided regulatory authority, which I believe runs counter to the interests of nuclear safety.

There is no reason, moreover, why this function cannot be effectively discharged by the regulatory agency. The Independent Investigation Program (IIP), which the NRC has recently established and which has worked well in its initial operation, shows that this can be done competently and objectively; and, in my view, the IPP should be allowed to demonstrate its continuing effectiveness.

Proposals for a Nuclear Safety Board which would be a separate agency are derived from the National Transportation Safety Board (NTSB), which has investigation responsibilities for aircraft, rail, highway and pipeline accidents. However, as the Brookhaven report (prepared in response to a Congressional directive) made clear, there are significant differences between the activities covered by the NTSB and those conducted by NRC licensees -- including the more limited regulation of the former, as contrasted to the pervasive NRC regulation of nuclear activities. Moreover, in view of the relative sparseness of significant nuclear events calling for investigative action by such a body, one wonders how an independent investigative group would occupy itself on a full-time basis and where it would obtain competent professionals capable of discharging their investigative functions when called upon.

In short, there is no reason why the NRC, or a single administrator regulatory agency, cannot competently and objectively discharge the accident investigation function. There is, on the other hand, a real concern that an independent Nuclear Safety Board would be (or become) a de facto parallel NRC, no matter how its functions are ostensibly characterized. Were this to occur, I see divided regulatory authority, confusion and instability, all of which would be counterproductive to the interests of nuclear safety.

For all of the above reasons, I am strongly opposed to the creation of an independent Nuclear Safety Board.

Questions of Senator Robert T. Stafford for Marcus A. Rowden

1. Do you believe that the present structure of the Commission adversely affects the protection afforded to the public health and safety?

Answer

I believe that the NRC is assuring protection of the public health and safety, as prescribed by the Atomic Energy Act. I also believe that this can be done more effectively with single-administrator management of the regulatory agency than with the present collegial type of management. In my opinion, this would allow better management of the regulatory staff, more effective policy leadership by the agency, and greater accountability for regulatory performance by the agency head -- all as more fully described in my prepared testimony and in oral responses to questions at the Subcommittee's hearing.

2. One of the reasons for the abolition of the AEC and the creation of the NRC was the conflict of interest between the promotional and regulatory responsibilities of the AEC.

   If the NRC were converted into an agency under the control of the executive, would it be possible to separate the promotional policies of the executive from the regulatory functions of the agency?

Answer

Yes. NRC would continue to be an agency with regulatory functions and responsibilities. An important assurance of this would be the fact that its activities would continue to be open to public scrutiny and vigorous Congressional oversight. Promotional and developmental functions would remain, as at present, with the Department of Energy.

3. Several persons, including high-ranking officials in the Justice Department, have stated that the NRC, as an institution, is incapable of seriously pursuing intentional wrongdoing in the nuclear industry.

   Based upon your experience, do you think that the NRC is capable of investigating potential criminal violations of the Atomic Energy Act or is the NRC too close to the industry which it regulates to conduct that type of investigation?

Answer

In my experience, the NRC has not been, and is not, too close to the nuclear industry to properly carry out its responsibilities. The primary responsibility of the NRC is to assure protection of the public health and safety. In carrying out that responsibility, the NRC must investigate potential or actual violations of its regulations and of the law. Such investigations have a regulatory (including civil enforcement) focus. Where a potential criminal violation is discerned by the NRC the matter should be referred to the Department of Justice for guidance as to appropriate further handling, including criminal investigation by the FBI if deemed necessary. The Department of Justice and its investigative arm should be responsible for the criminal investigation. For evident reasons, however, the NRC must be in a position to pursue remedial safety action irrespective of the pendency of a criminal investigation. In short, what is required of the NRC is that it be alert to the possibility of potential criminal violations and that, where discerned, it consult with the Department of Justice in an appropriate and timely manner. The Department of Justice, because of its functional responsibilities and competance, should conduct criminal investigations.

4. Do you support legislation, such as S. 891, requiring firms supplying, owning, or operating the components of nuclear power plants to report known defects concerning potential safety hazards and to report known failures to comply with NRC regulations? Would this legislation improve the process for the regulation of nuclear power?

Answer

I oppose enactment of legislation such as S.891. Section 206 of the Energy Reorganization Act, as it now stands, provides an adequate framework for requiring reports of non-compliance with NRC safety requirements or of defects which could create a substantial safety hazard. A well established and well understood reporting regime now exists under Section 206 and the implementing NRC regulations (10 CFR Part 21); and this regime, in my opinion, fully satisfies the objectives of its Energy Reorganization Act sponsors. NRC, which proposed what is now S.891, has not advanced persuasive reasons for expanding the scope of Section 206 and I am unaware of any sound basis for adding a further layer of reporting obligations -- one which would be even more complex to implement (both for NRC and for firms within its scope) than Section 206 initially proved to be after its enactment as part of the Energy Reorganization Act. Moreover, I question the workability and the fairness of legislation (such as S.891) that would impose a penalty on a firm for non-reporting when the firm did not "knowingly and consciously" fail to report a matter. In short, I do not believe this legislation would improve the process for the regulation of nuclear power.

Testimony of Peter A. Bradford

June 18, 1986

Regarding the Regulatory Process for Commercial Nuclear Power Plants
Before the
Subcommittee on Nuclear Regulation
United States Senate Committee on Environment and Public Works

S. 1235, S. 2291, S. 2471

In order to prescribe for a sick patient, a doctor must first successfully diagnose the illness. Legislating is similar except that you must consider not only the disease itself but also the conflicting views of the public both as to the nature of the disease and the desirable remedy, which makes the task even harder. In diagnosing the Nuclear Regultory Commission, it seems reasonable to begin by completing a sentence beginning, "The trouble with the Nuclear Regulatory Commission is that it ....".

In order to make this task easier, let me make it multiple choice. The possible answers include the following:

A. Issues licenses too slowly.
B. Issues licenses too quickly.
C. Is too easily swayed by public opinion.
D. Pays no attention to public opinion.

E. Is too willing to impose expensive requirements that contribute little to safety.

F. Lets the economic interests of the nuclear industry override serious safety concerns.

G. Acts as a debating society whose oft publicized differences of view keep the public unduly worried about nuclear safety.

Before attempting to state the disease, a sensible doctor would review the symptoms. A substantial segment of the public feels itself to be unduly threatened by some combination of the accident and the economic risks of nuclear power plants. Are the plants really too dangerous and/or too expensive? Or do they just appear that way? Has the Nuclear Regulatory Commission taken too many risks or too few?

The most important symptoms seem to me to be the following:

1. Events of serious safety and economic significance have taken place at U.S. nuclear power plants. Fortunately, the damage has been almost entirely economic, but the fact is that these units have surprised their owners, their builders and their regulators too often for comfort.

2. Despite the best efforts of the Department of Energy and the NRC, the waste question remains unresolved and is the subject of diminishing rather than increasing public confidence.

3. All of the nuclear power plants ordered since 1975 have been cancelled, and none in any case have been ordered since 1978.

4. The economics of nuclear power now appear to be unfavorable compared to almost all other sources of electricity, including coal.

5. According to a recent CBS poll, 68% of the American public now oppose constructing more nuclear power plants. A decade ago 71% thought that it was important to continue or expedite the constructing of new nuclear units.

My own diagnosis as to the common thread suggested by these symptoms is that this technology has led to too many unpleasant surprises. However much there is to be said on its behalf in terms of cost, diversity of supply, relative safety and comparison to the alternatives, the public is well aware that there is a remote possibility of a catastrophic accident. Against this background, they are not prepared to put up with a continuing series of events that suggest that the industry and its regulators do not completely know what they are doing.

Furthermore, neither power company executives nor the Wall Street financiers who traditionally handle utility stock and bond issues were remotely prepared for the economic problems that their nuclear commitments have visited on them in recent years. These economic surprises are every bit as responsible for the current lack of interest in new nuclear units (or even in completing units on which hundreds of millions of dollars have already been spent) as the safety concerns.

The root cause of these surprises is that this industry grew much too fast in terms of its actual operating experience between 1965 and 1975. During this period, the regulators were single-mindedly devoted to expanding the uses of nuclear power and to overseeing the transition to reprocessing and to breeder reactors. When the lessons of operating experience began to roll in - such as the General Electric pipe cracking problem, the Brown's Ferry fire, various types of fuel failures, steam generator tube problems and the inadequacy of seismic design - terribly expensive lessons had to be applied in plants that were well under construction. Significant problems in terms of waste management and nonproliferation received little attention. Offsite emergency planning received virtually none. Operator training and control room design were underestimated as were hydrogen control, quality assurance and the qualification of equipment to withstand an accident environment.

Some of these shortcomings came to light at Three Mile Island. Others showed up in malfunctions at other plants. Still others emerged as the result of testing and analysis. This process cost billions of dollars and destroyed the substantial public consensus in favor of nuclear power that existed a decade ago.

* * *

Against this background, what were the strengths and weaknesses of the three bills before you?

It seems to me that S. 2291 and S. 2471 have one shortcoming in common. They both seek to do for the NRC what a capable NRC ought to be doing for itself. In so doing, it seems to me that they distract attention from the absolutely crucial question of who is appointed to serve on the NRC.

As to S. 2291, the extent of this weakness seems to me to be fatal. The NRC really does not bear the same relationship to nuclear power plant operation that the FAA (with its extensive operational responsibilities) bears to airline safety. The NRC was itself supposed to function as a nuclear safety board toward the nuclear industry. It has its own Advisory Committee on Reactor Safeguards and its own internal capability for investigating operational errors, mishaps and accidents. With all due respect to the bill's sponsors and their legitimate frustrations with the NRC's response to Salem and other problem areas, I do not think that another independent agency to oversee the NRC is likely to be an effective response.

An administration committed to nuclear safety will make its priorities felt in its appointments to the NRC itself. Lacking this commitment, any administration's appointments to the Safety Board will not be effective. The distance of the Safety Board from day-to-day regulation may at first make it less defensive of conventional wisdom and practice, but this is not likely to be an enduring advantage.

I am not personally familiar with the workings of offices of Inspector General. While S. 2471 is vulnerable to some of the same criticisms as S. 2291, it has some offsetting virtues. For one thing, it would put an end to the deplorable hash that the NRC has made of its Office of Inspector and Auditor. For another, it might improve both the way in which the NRC conducts investigations and the NRC's continuingly difficult relationship with the Justice Department. For another, because it will not be a separate board with competitive overtones, it is less likely to bog nuclear regulation down in bureaucratic warfare.

In an ideal world, S. 2471 would not be necessary. The divergence of views among the commissioners together with the independent inputs from the ACRS and the licensing boards, to say nothing of Congressional oversight and public intervention, would be adequate to assure that the NRC itself discharged the functions of an office of inspector general. Since that has not happened and shows no serious prospect of happening in the near future, I think that S. 2471 deserves your favorable consideration.

As to S. 1235, with its proposal to replace the existing Commission by a single administrator, I can understand and sympathize with this measure as an expression of frustration with the current NRC. However, I do not think that the proposal will work as intended for several reasons.

First, I don't think that it gets at the underlying causes of the problems of nuclear power. The reasons for that view were set forth in some testimony that I gave several years ago in the wake of the original recommendation by the Kemeny Commission in this direction and President Carter's followup reorganization plan. I have attached that testimony as Attachment A, and I will not repeat it further at this time.

Second, I am afraid that the proposed change substitutes reorganization for a more fundamental change in approach. While it might buy a grace period of sorts, depending on the person actually appointed to head the agency, the failure to make more fundamental changes in approach would inevitably mean a return to today's situation within a year or two.

Third, a single administrator agency would inevitably slow the flow of information to both the Congress and the public. If you look back over the last several years, I think that you will inevitably come to the conclusion that much of what the outside world learns about the internal workings of the NRC comes in the form of separate views expressed by one or more commissioners in disagreement with the majorities course.

Fourth, I come from a state in which nuclear power is a source of continuing and exceptional controversy. Twice in the last five years referenda to shut down Maine's only operating nuclear power plant have gotten more than 40% of the vote. A third such effort in 1987 seems likely. There is no way that I can imagine the replacement of the existing Commission by a single administrator serving to diminish that level of public concern, and it may enhance it.

Fifth, I don't think that the alternative of an effective collegial regulatory commission has ever been given a fair trial. A collegial agency is almost inevitably less efficient that a single administrator, but it has offsetting strengths if its members are chosen for their competence and their ability to work together as a team. This can only occur if the chairman is a figure capable of commanding broad public respect for his or her commitment to nuclear safety and if that individual is actively consulted as to other appointments whose talents, views and backgrounds are a constructive supplement to those of the chair. This formula has never been tried at the NRC to my knowledge.

Sixth, the single administrator approach inherently lacks the very stability that nuclear power urgently needs. Because the individual in charge can be replaced following a presidential election, the swing from a president strongly supportive of nuclear power to one who is more skeptical could produce quite a sudden change of regulatory direction of just the type that a commission structure insulates against. If the financial community had to factor into its existing analysis the likelihood that President Reagan might be succeeded by one of the announced Democratic candidates with considerably cooler views toward nuclear energy and that the nuclear regulatory climate would change dramatically overnight, nuclear power's prospects would not be improved.

There is something of a middle ground between the existing Commission and S. 1235 that I think has much to commend it. That middle ground consists of reducing the NRC to 3 members. Having served on both a five member and a three member commission, I have found that the potential for controversy and discord is much less in a well chosen three member agency. The only difficulty at the federal level - but it is a substantial one - is that the Sunshine Law as currently written would prohibit any two of the members from ever meeting informally. I don't think that the benefits of the Sunshine Law are so great as to preclude its being modified to permit the reduction of several of the federal agencies to three members permitted to have nonpublic discussion of agency business.

I have on other occasions made a number of proposals that I think would strengthen the regulation of nuclear power and make it more publicly acceptable. These include the modification of the current federal preemption of the states from any say in nuclear standards and the adoption of either a public counsel's office or a program of intervenor funding for the NRC. I have attached a talk that sets forth some of these approaches in more detail.* They are sufficiently far removed from anything in the legislation before you that I will not reiterate them now. Packaged together with S. 2471 and S. 1235, they might conceivably command broad support.

I would be glad to work further with this Subcommittee on that basis or in any other way that I can be helpful.

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*Retained in committee files.

REPLIES FROM PETER A. BRADFORD

Response to Questions from Senator Alan K. Simpson

Q1. To what extent do you view "collegial interaction" as an advantage of the Commission struture, and how much "collegial" formulation of policy -- with all five commissioners present -- actually took place at the Commission during your tenure?

A. Interaction among commissioners is the primary advantage of any commission structure, and it is a very important one. My experience in the last four years on the Maine Commission and my observation of many utility commissions around the country proves to me that an effective commission can be a very useful policy-making body. However, it is absolutely essential that the commissioners be chosen with some regard to their demonstrated capacity for balanced teamwork.

You wouldn't want five prima donnas or five centers on a basketball team. Furthermore, you wouldn't have much hope for a basketball team on which two players were chosen by the fans, two by the faculty and one by the coach. Nor (and I fear that this will be the case on the NRC by this time next year) would you want a team on which all five members had been chosen by the opposing teams.

I do believe that most of the benefits of the commission form can be obtained with three members instead of five. On a three-member commission, for each commissioner to have one conversation per day with his colleagues requires a total of only three conversations. On a five-member commission, ten conversations are required. On a three-member commission, each commissioner can write a memo to each of his colleagues and six pieces of paper must flow. A similar exchange on a five-member commission requires 20 pieces of paper. This same geometry pervades the interactions between Commission and staff and increases the chance for slippage, friction, dissent and inefficiency.

That having been said, I think that most decisions during my time at the NRC were a product of moderately active collegial interaction. Commission office assistants worked constantly together. Even at Commission meetings suggestions were made; compromises were reached; and meaningful exchange took place. Serious disagreement was a factor in only about 5% of the cases.

On the Maine Commission, which has been put together with teamwork much more strongly emphasized and without the barriers of the federal Sunshine Law, meaningful and effective exchange on everything from personnel matters to major policy decisions is a daily occurrence.

Q2. Do you think that the diversity of views that are brought to bear on any given issue at the Commission, as a result of having five commissioners, is any greater than the range of views that the administrator of EPA or FDA or the FAA has, when he makes a decisions, as a result of the interaction of those administrators with their staffs and with the public?

A. Yes, because each commissioner has an equal vote. Consequently, several views must be blended if a decision that commands at least majority support is to be reached. In a hierarchical agency with a single administrator, the opportunity for gathering and harmonizing diverse views may be equally great, but it is not a prerequisite to a final decision. Consequently, there will be many times when it is not done.

Q3. Does the Commission have a broader perspective than other health and safety agencies, simply because it has more members?

A. If the members are sensibly chosen, a commission will have a broader perspective than a single administrator agency. Whether the issues relate to health and safety or economics does not seem to me to be important in this context.

Q4. Do you think that these other executive branch agencies, which are headed by a single administrator, carry out their statutory responsibilities to protect the public health and safety in any more or less effective manner than the Commission?

A. While I regard the NRC's performance as unfortunate in many important respects, I do not attribute its failings to the fact that it is a commission. The experiences at EPA under Anne Gorsuch or at NASA culminating in the Challenger and other recent failures are no more determinative of all single administrator agency possibilities than is the NRC of all commission possibilities. The bottom line is that dingbats who don't believe in the fundamental mission or structure of the agency are unlikely to make effective agency heads whether single or in groups, whether Democrats or Republicans.

Q5. Opponents of the single administrator idea have argued that, with the change in administrations, the "politics" of the agency will shift violently, as different presidents appoint administrators with fundamentally different views about nuclear power. Yet, as I look at the other health and safety agencies in the executive branch, the heads of those agencies have, by and large, come from the mainstream of the regulatory community. To what extent is this potential for violent changes in policy direction a real concern?

A. Your observation seems correct to me. However, strong shifts (for example, Joan Claybrook or Gus Speth compared to their successors) have occurred. The nuclear industry, with its long lead times and large fixed investment, is less able than most to adjust to significant changes in direction. For example, look at the difficulty being caused by the imposition of relatively modest emergency planning requirements since Three Mile Island. Furthermore, because nuclear power is more likely to be an issue in national political campaigns then, say, the FDA, an incoming president is more likely to be committed to a fixed nuclear agenda than in the case of the agencies that you have observed.

It was Carl Walske who said that the election of Ronald Reagan had caused an industry reaction "between ecstasy and euphoria". One can only imagine his reaction to the election of Mario Cuomo or Gary Hart, to say nothing of Jerry Brown. The industry has tended to put more emphasis than I would on the absence of a "favorable" regulatory climate as having caused many of its problems. Nevertheless, I think that the potential for sudden changes in direction would worry the financial community, which unfortunately tends to reflect the industry's assessment of its government relations problems. My guess is that the potential for sudden swings would have a substantial impact on the cost of capital to a power company involved or considering becoming involved in nuclear power in the future, but you could get a better assessment of this from investor representatives directly.

Q6. On the question of public participation in the decision-making process and public visibility of the actions of the Commission, would you please comment on whether the broad public interest -- beyond the self-styled handful or Washington-based "public interest" groups -- is better served by the existing collegial approach or by a single administrator?

A. If you are comparing a good single administrator to a good commission on this issue, I don't think that it matters very much. However, a commission that is hostile to public participation and to public scrutiny will have a much harder time keeping its actions and motives secret than will a single administrator who is similarly inclined.

Q7. In many cases, the matters of greatest public interest are often the licensing proceedings for individual reactors, where the local public becomes actively involved. If we adopt a single administrator, should we retain the basic adjudicatory framework for these licensing proceedings, and if we do, what sacrifice, if any, are we making in the amount of public participation in these proceedings?

A. The adjudicatory framework is well worth retaining, with one important innovation. An Office of Public Counsel should be appointed within the Commission to represent public concerns in these proceedings. It should be given an adequate budget to do so.

In Maine and in many other states, there exists such an office to participate in PUC proceedings. Our experience has been to the effect that such an office substantially reduces the kinds of diffuse and ineffectual public participation that have caused NRC and other regulatory proceedings to be denounced as shams. On issues that are not of real importance, intervenors will accept such a determination by a public counsel in a way that they often will not from the agency itself. Duplicative concerns can be consolidated in the public counsel's office. Most importantly, concerns that have real validity can be effectively presented, negotiated, and resolved.

I should note that in Maine we have had only one fully litigated rate case since 1983. All of the major proceedings in the last 30 months have been settled by stipulation or other agreement among the parties, ratified by the Commission. A major reason that this process has retained sufficient credibility to ward off those who criticize it as "deal making" is the continuing participation of the state Public Advocate who was formerly a lead counsel for citizen intervenors.

Q8. In 1980, Reorganization Plan No. 1 of 1980 was issued by the Carter Administration, in response to the concerns raised by the post-TMI investigations. Please comment on the extent to which this plan has been effective in addressing the concerns that Kemeny and Rogovin raised?

A. To the extent that the Kemeny and Rogovin reports focused on insufficient attention to safety at the NRC, Reorganization Plan No. 1 could only have succeeded if appointees who shared the Kemeny and Rogovin criticisms had been named to the Commission. With the exception of Commissioner Asselstine, such appointments have not been made.

To the extent that Reorganization Plan No. 1 focused on the efficiency of decision-making within the Commission, it had a number of impacts. Emergency response is now vested entirely with the chairman, although an extraordinarily unwise corollary of this decision has been to dispense with the taping of the chairman's emergency response activities. This will mean that the NRC's motives in the wake of the next accident will be the subject of far more speculation and suspicion than was caused by the revelations of occasional ineptitude that led to the termination of the TMI taping system.

Of course, Reorganization Plan No. 1 did not adopt the fundamental Kemeny and Rogovin recommendation that the Commission be done away with, nor did it opt for the three-member Commission that I prefer. To this extent it did not produce the streamlining and accountability that were sought in those reports, but nor did it produce the drawbacks of the single administrator format.

Q9. In the interest of balancing the need for independent regulation against the proposal to replace the Commission with an independent single administrator within the executive branch, please comment on the merits of a comprehensive regulatory reform package that would include -- (1) the single administrator proposal; (2) an inspector general to carry out the responsibilities of the NRC's existing Office of Inspector and Auditor; (3) a fact-finding nuclear safety board; and (4) standardization legislation? Would an approach like this contain the essential elements necessary to restore credibility and effectiveness to nuclear regulation, while at the same time striking that delicate balance between the executive and legislative branches?

A. I would prefer a three member Commission with a modified sunshine law, an inspector general, a strengthened internal operations evaluation division, and, if standardization legislation is to be part of the package, it should include a requirement for early siting and an adequately funded public counsel's office.

Maine is currently considering a referendum on the closing of Maine Yankee. Passage of such a measure (previous efforts got about 40 and 44% in 1980 and 1982), would be in essence a vote of no confidence in the existing NRC. I see no possibility that replacing the NRC with a single administrator (especially one with the outlook of the current Commission majority) would increase the acceptability of Maine Yankee. It might well have the opposite effect.

I think that the waste repository licensing process would suffer a similar loss of credibility given the likelihood that the administrator would in fact be chosen or at least screened by DOE.

Response to Senator Stafford's Questions

Q1. Do you believe that the present structure of the Commission adversely affects the protection afforded to the public health and safety?

A. No. I believe that the Commission's shortcomings over the last two decades have come much more from the outlook and sometimes the tempermen• of the appointees than from the agency structure. There are many effective and able state commissions, including the Vermont Commission, that could take over the NRC tomorrow and substantially improve its workings within three months.

Q2. One of the reasons for the abolition of the AEC and the creation of the NRC was the conflict of interest between the promotional and regulatory responsibilities of the AEC.

If the NRC were converted into an agency under the control of the executive, would it be possible to separate the promotional policies of the executive from the regulatory functions of the agency?

A. I don't believe so, although this may be a diminishing problem. The true believers from the Atomic Energy Commission went from ERDA to the Department of Energy after the AEC's breakup in 1975. The fate of reprocessing and the Clinch River breeder shows that, even in this Administration, their influence is waning in the face of adverse economic and - to some degree - technical experience and evidence.

However, an inevitable conflict of interest within the Administration with regard to the nuclear waste program would remain. This is a difficult enough problem in any case. To proceed creditably under circumstances in which the single administrator of the licensing agency was likely to be the hand-picked choice of the Secretary of Energy would be nearly impossible.

Q3. Several persons, including high-ranking officials in the Justice Department, have stated that the NRC, as an institution, is incapable of seriously pursuing intentional wrongdoing in the nuclear industry.

Based upon your experience, do you think that the NRC is capable of investigating potential criminal violations of the Atomic Energy Act or is the NRC too close to the industry which it regulates to conduct that type of investigation?

A. The NRC's substantial investigative failings flow directly from the outlook of the commissioners. There is nothing about the Commission structure that makes it inherently unable to pursue effective investigation. The Central Maine Power Company Board of Directors completely changed CMP's top management as a result of what it learned in large part from a 1983 Maine PUC investigation. The unfortunate fact is that the NRC commissioners have, far more often than not, communicated to the staff in various ways the conclusion that they want to hear, see and speak no evil where potential criminal situations or intentional wrongdoing are involved.

Q4. Do you support legislation, such as S. 891, requiring firms supplying, owning, or operating the components of nuclear power plants to report known defects concerning potential safety hazards and to report known failures to comply with NRC regulations? Would this legislation improve the process for the regulation of nuclear power?

A. I am unfamiliar with these aspects of S. 891. However, I think that any firm owning or operating a nuclear power plant has such obligations already. If the vendor firms don't, they certainly should.

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UNITED STATES SENATE
SUBCOMMITTEE ON NUCLEAR REGULATION
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

TESTIMONY OF ELLYN R. WEISS
GENERAL COUNSEL
UNION OF CONCERNED SCIENTISTS

June 18, 1986

REFORM OF THE REGULATORY PROCESS FOR COMMERCIAL NUCLEAR POWER

Thank you for the invitation to appear today. The Union of Concerned Scientists is a non-profit organization supported by the contributions of approximately 100,000 persons nationwide. UCS is headquartered in Cambridge, Massachusetts and maintains professional staff there and in Washington, D.C. UCS's main areas of concern are in arms control, nuclear safety and energy policy.

For over 15 years, UCS has been actively involved in the issue of nuclear power plant safety, performing independent technical analyses, publishing studies and participating in numerous AEC and NRC proceedings. We are pleased to address the bills before the Committee.

Cambridge Office: 26 Church Street · Cambridge, Massachusetts 02238 · (617) 547-5552

Independent Nuclear Safety Board (S. 2291)

UCS strongly supports S. 2291. The bill would create an independent Nuclear Safety Board, similar to the National Transportation Safety Board, to investigate nuclear accidents and near-misses and to make recommendations to the NRC for the steps necessary to address their root causes and prevent recurrence. We believe that the time has clearly come for such a step.

Chernobyl should remind us of the potentially catastrophic consequences of failure to set and enforce the highest safety standards for nuclear power, especially since there are now 100 licensed plants in this country and some 20 under construction. There is a wealth of evidence that the NRC is not adequately performing the job of a strict watchdog, at a cost to both the public safety and our economy. The abandoned Zimmer project, the enormous disarray at TVA, with none of its nuclear plants safe enough to operate, as well as the disturbing frequency of near-misses are a few examples of this failure.

We believe that the NRC is institutionally ill-suited to conduct and follow-up investigations because of the inherent conflict of interest involved when the agency investigates its own conduct. This conflict is presented in virtually every case, since NRC's conduct is implicitly or explicitly in question whenever an accident occurs. For example, the Kemeny Commission found that the agency's failures were at least as significant a contributor to the TMI accident as any other cause. This has continued to be the pattern in subsequent investigations. An independent organization, outside the authority of the NRC, is needed to bring credibility to this crucial task.

Nor is the Advisory Committee on Reactor Safeguards (ACRS), NRC's statutory advisory committee, in a position to perform this function. Professor H.W. Lewis, a member of the ACRS, testified in favor of the independent Nuclear Safety Board before the Subcommittee on Energy and the Environment of the House Interior Committee on June 10, 1986. He noted that, during the past year, "the Commission has chosen on a number of critical occasions, to put ACRS in a position subordinate to the NRC Staff, and to inhibit its technical range of inquiry." The NRC has, Lewis testified, "consciously, and in many ways, made the position of ACRS less than many believe."

We do not believe that any other legislation pending before you this year is more likely to make a positive step toward enhancing safety than S. 2291.

Single Administrator (S. 1235)

We see three major disadvantages to a single administrator for NRC. First, the requirements of the Sunshine Act that official business be conducted in public would become inapplicable. All decision-making would take place behind closed doors. In UCS's view, that would be a great loss and a detriment to public safety. The influence of the regulated industry, already overwhelming at NRC, could only increase when public access and scrutiny are lost.

Second, NRC decision-making might become subject to greater control by OMB, which has shown its ability to manipulate, again behind closed doors, the substance of health and safety decisions at other single-administrator agencies, most notably EPA.

Thirdly, transforming NRC to a single administrator agency would silence the public voicing of dissenting views on policy and technical issues. It would at the same time shut off a vital safety valve for the communication by plant workers and NRC staff members of safety problems which have been stifled by licensee management and NRC supervisors. Just last week, five senior TVA employees told a sad story of being repeatedly rebuffed over a period of years by TVA and NRC in their attempts to have safety problems faced and corrected. They finally approached Commissioner Asselstine, after the utter failure of official channels to respond. Had there been no safety valve, it is entirely possible that the TVA plants would now be operating, despite the fact that it is now acknowledged that they did not meet the most basic standards necessary to ensure public safety. Now is not the time to shut off dissent.

Supporters of the single administrator concept claim that it would bring efficiency and accountability to the NRC. While we acknowledge the worthiness of these goals, we do not believe that they outweigh the costs, nor are we convinced that the single administrator model offers intrinsic advantages over any other. There are numerous models for agency management in the state and federal governments, and while one may argue intuitively that a single administrator would improve NRC, the evidence for this is far from clear. It should be remembered that some of the worst examples of mismanagement and abuse of authority in recent memory are associated with single administrators; EPA is the most prominent example. The principle of accountability did not prevent those abuses, and while the administrator eventually lost her job, the agency was completely discredited and the cause of environmental protection gravely damaged. Had that been NRC, the cost could have been very much greater. Frankly, UCS believes that it is far more important to prevent accidents from happening than to be able to oust the administrator after one occurs. It is our view that a commission organization is more conducive to a conservative approach to safety.

Inspector General (S. 2471, Sec. 2)

The Union of Concerned Scientists supports the concept of an Inspector General for the NRC. The agency regulates an industry that has already cost the American people 125 billion dollars — more than the cost of the Vietnam war. It is indefensible that it is exempted from the Inspector General legislation applying to most other federal agencies.

The Inspector General should replace the current office of Inspector and Auditor (OIA) which is a dismal failure. Its current director is being investigated by the Department of Justice due to allegations that she harassed an employee and its last director departed under a cloud for his involvement in the Zimmer debacle. The office has virtually no credibility. Both Section 2 of S. 2471 and H.R. 4835, introduced in the House by Mr. Gejdenson, would set up an Inspector General and UCS would support either. We would suggest that the conflict of interest provisions of the House bill [Sec. 212(c)] be adopted.

Other Changes

You have also asked for UCS's views regarding what further legislative changes should be made to improve the process for the regulation of commercial nuclear plants. Let me make it clear that our focus is on measures to improve the safety of the currently operating plants and those under construction. Whether or not another nuclear plant is ever licensed in this country, with 100 licensed and 20 under construction, priority must be put on reducing and managing the risk that we currently face.

To the extent that Congress intended the 1974 Energy Reorganization Act to create a strong and independent nuclear power regulator by removing the inherent conflict presented by the dual promotional and regulatory functions of the AEC, that goal has not been achieved. UCS has documented this failure in our 1985 report on the NRC's first ten years, "Safety Second."

We have become convinced that there is no magic bullet — no special statutory language or simple management reorganization — that will ensure that the NRC treats protecting the public safety as its overriding obligation. We believe that the best hope for enhancing safety lies in creating a better system of checks and balances, improving public participation and recognizing that the authority of the states should be parallel with their responsibilities in the area of emergency preparedness.

The system which was intended to set and strictly enforce the highest standards for safety is not working. A large part of the problem is institutional; the NRC staff put its official stamp of approval on each currently licensed plant and is responsible for reviewing those still in the pipeline. To concede that a safety problem was overlooked at any plant raises questions about the safety of other plants and about the quality of the agency's own judgement. This is a powerful disincentive to early and open airing of safety issues. There is an inevitable tendency to sweep them under the rug where they simply get worse and worse.

Therefore, independent checks and balances are needed to provide a counterweight to this institutional dynamic. The independent Nuclear Safety Board and Inspector General are two of the most important. We also believe that the hearing officers who decide licensing cases should be truly independent Administrative Law Judges. There are currently many former NRC employees sitting on hearing boards. The judges should not be subject to selection by the NRC. The public should at least be able to expect a fair day in court, which is not the norm now. Nor should the NRC staff act as an advocate for the license applicant, as it does now.

There are a number of other institutional reforms which UCS has supported in the past and continues to support. Most have a common theme: we have learned by experience that the only way to reform the NRC is to shine the light of public scrutiny on it and to enhance the means for public participation in its decision-making.

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August 14, 1986

Senator Alan K. Simpson
Chairman
Subcommittee on Nuclear Regulation
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510

Dear Senator Simpson,

I am enclosing my responses to the written questions forwarded to me. Thank you for the opportunity to present our views.

Actually, I never even felt the cold; it must be that fire in the belly that all public interest types have.

Thanks again.

Very truly yours,

Ellyn R. Weiss
General Counsel

Cambridge Office: 26 Church Street · Cambridge, Massachusetts 02238 · (617) 547-5552

Responses to Senator Simpson's Questions

Question: 1. You and the organization that you represent -- the Union of Concerned Scientists -- have been very critical of some of the actions taken by the Commission and of some of the legislative proposals that we are now considering, including the single administrator proposal, because, as you describe in your testimony, "all decision-making would take place behind closed doors." What opportunity do you have now to participate in the decision-making process that would be lost if the single administrator bill were enacted?

Answer: 1. We, as well as any other interested person, now have access, a result of the Sunshine Act, to advance notice of Commission meetings, their date and subject. We are able to attend, to learn what issues (both general and plant-specific) are of concern to the Commission, what information is being considered in decision-making, and what proposals are receiving serious consideration. We are then able to follow this up, obtain background information and make our views and analyses available to the NRC and other interested person. Under the single administrator regime, there would be no such public meetings, since the Sunshine Act is inapplicable. Further, such a system would be inherently unbalanced, since the industry will continue to have open to it many channels of informal communication with the Commission and the staff as well as the formal mechanisms which it already dominates, including standard-setting committees and licensing proceedings.

Question: 2. To what extent do you view "collegial interaction" as an advantage of the Commission structure, and how much "collegial" formulation of policy -- with all five Commissioners present -- do you think actually takes place at the Commission?

Answer: 2. I do view collegial interaction as a benefit of a Commission structure. In the past, this agency operated in that manner, it now does not. The lack of "collegiality" now is a function of the predilections and preferences of a majority of the current Commissioners. What concerns me more about the single administrator idea than the loss of collegiality is the loss of a "safety valve" for communicating competing views and information and for providing a way for engineers and workers to focus attention on safety problems that have been disregarded by utility management and with NRC staff. TVA is the most prominent current example of the importance of this safety valve.

Question: 3. On this question of "diverse" perspectives, I wonder if you would comment on whether you think that the diversity of views that are brought to bear on any given issue at the Commission, as a result of having five Commissioners, is any greater than the range of views that the administrator of EPA or FDA or the FAA has, when he makes a decision, as a result of the interaction of those administrators with their staffs and with the public?

Answer: 3. I cannot speak to the diversity of views available to EPA, FDA or FAA as a result of interactions with their staffs and the public. What I do know is that, as far as NRC is concerned, virtually the only means for the public to present views is through those parts of the process that are, by law, public -- adjudication, rulemaking and public meetings. On the other hand, as I noted above, the industry has daily "interaction" with NRC informally and formally. There is no question but that, once meetings are no longer required by law to be held in public, an important conduit for the presentation of diverse views will be shut off.

Question: 4. Does the Commission have a broader perspective than other health and safety agencies, simply because it has more members?

Answer: 4. The answer to that question depends on the persons involved. It is theoretically possible to imagine one person so experienced and open-minded as to bring all the necessary perspective to the job. On the other hand, five people are far more likely to bring a collectively greater breadth of experience, diversity and perspective to the task than is one person.

Question: 5. Do you think that these other executive branch agencies, which are headed by single administrator, carry out their statutory responsibilities to protect the public health and safety in any more or less effective manner than the Commission?

Answer: 5. As I discussed in my testimony, I have seen no evidence that any particular administrative model is inherently better for all agencies or even for certain types of agencies. As you are aware, some of the worst abuses of public trust in recent memory occurred at EPA, a single administrator agency. FAA is far from universely acclaimed. I also find the comparison with NASA intriguing. NASA, with its single adminstrator, was often held out as a sort of prototypically well-managed government agency. I would suggest that the lack of an institutional outlet for dissenting views causes problems to fester until they become out of control. Virtually all the arguments I have heard in favor of a single administrator for NRC are theoretical; e.g. it would increase accountability. I have seen no facts or evidence which supports a conclusion that single administrator agencies actually do a better job at fulfilling their public responsibilities.

Question: 6. Opponents of the single administrator idea have argued that, with the change in administrations, the "politics" of the agency will shift violently, as different presidents appoint administrators with fundamentally different views about nuclear power. Yet, again, as I look at the other Health and Safety agencies in the Executive Branch, the heads of those agencies have, by and large, come from the mainstream of the regulatory community. To what extent is this potential for violent changes in policy direction a real concern?

Answer: 6. With the important exception of the current administration, I would agree that most heads of agencies have come from the mainstream.

Question: 7. In many cases, the matters of greatest public interest are often the licensing proceedings for individual reactors, where the local public becomes actively involved. If we adopt a single administrator, should we retain the basic adjudicatory framework for these licensing proceedings, and if we do, what sacrifice, if any, are we making in the amount of public participation in these proceedings?

Answer: 7. I am aware of no reason why a shift to a single administrator would, of itself, affect the "basic adjudicatory framework" of licensing proceedings. That is, hearings before adjudicatory boards and appeals would not necessarily have to be affected. We have long supported some changes in the hearing system (e.g. Independent Administrative Law Judges) which would enhance public participation rather than detract from it.

Question: 8. In 1980, Reorganization Plan No. 1 of 1980 was issued by the Carter Administration, in response to the concerns raised by the post-TMI investigations. I wonder if you would comment on the extent to which this plan been effective in addressing the concerns that Kemeny and Rogovin raised?

Answer: 8. I do not believe that the basic concerns expressed by Kemeny and Rogovin were ever ameliorated by the NRC, but I also believe that the reason for this has very litle to do with the issues addressed the Reorganization Plan. The Kemeny and Rogovin Commissions focused presciently on the fundamental need to change the old attitudes prevalent at NRC that were manifested in a preoccupation with licensing new plants and relative lack of interest in ensuring the safety of operating plants. (Kemeny Commission Report, Overview, p.21). For the first year or two after TMI-2, it seemed possible that those attitudes would change. For the past several years, however, it has become clear that they have not.

Question: 9. In the interest of balancing the need for independent regulation against the proposal to replace the Commission with an independent single administrator within the executive branch, please comment on the merits of a comprehensive regulatory reform package that would include — (1) the single administrator proposal; (2) an inspector general to carry out the functions of the NRC's existing office of inspector and auditor; (3) a fact-finding nuclear safety board; and (4) standardization legislation? Would an approach like this contain the essential elements necessary to restore credibility and effectiveness to nuclear regulation, while at the same time striking that delicate balance between the executive and legislative branches?

Answer: 9. As I said at the hearing, we do not believe that a single administrator for NRC would be a positive step toward increasing public safety. While we would, of course, give open-minded consideration to a package, there are many more elements that we consider essential. Examples include: a change in the statutory language to ensure that any standardized designs achieve a significant advance in safety over current light water reactors (e.g. through greater reliance on passive design elements), explicit recognition of a state role consistent with the states' obligations to their citizens, particularly in the area of emergency response.

Responses to Senator Stafford's Questions

Question: 1. Do you have any suggestions other than organizational changes in the NRC that would increase the protection afforded to the public health and safety?

Answer: 1. As I noted in my testimony, I believe legislation should redress the unhealthy dominance of the NRC by the industry it regulates through enhancing checks and balances. The organizational changes we endorse, including an Independent Safety Board, an Inspector General and independent Administrative Law Judges, are intended to move in that direction.

Beyond such organizational changes, we believe legislation can move toward concretely improving safety at current plants by setting firm deadlines for NRC to complete resolution of unresolved safety issues. It is no longer tolerable to let these known safety problems linger indefinitely on the hope that an accident will not happen. In addition, Congress could force the agency to act by directing NRC to present, by a specified date, a plan for resolution of what UCS considers two of the most serious sets of safety issues: 1) the inadequacy of General Electric containment designs and 2) the inherent flaws in the Babcock and Wilcox design.

In addition, NRC should be directed to consider, in an open process, the adequacy of current emergency planning rules in the light of Chernobyl. A bill which moves in this direction has already been introduced, S. 2593. I am enclosing more material which addresses these subjects.

Question: 2. Do you support legislation, such as S. 891, requiring firms supplying, owning, or operating the components of nuclear power plants to report known defects concerning potential safety hazards and to report known failures to comply with NRC regulations? Would this legislation improve the process for the regulation of nuclear power?

Answer: 2. Yes, we believe that such legislation would improve the process. Suppliers are the persons most likely to know of safety defects and NRC's enforcement authority should unambiguously run to them.